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The great Creator did not bestew so much Curiosity and Workmanship upon his Creatures to be looked upon with a carelestingurbus Eye.

Derham's Phys. Theol. Book xi.

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## NATURAL HISTORY

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#### ORNITHOLOGY.

#### THE THROSTLE.

HIS bird is also called the songthrush, or mavis. It is the finest of our singing birds, not only for the sweetness and variety of its notes, but for the long continuance of its harmony; as it entertains us with its song for almost three parts of the year. Like the missel-bird, it chooses to deliver its music from the top of a high-tree, but descends to some low bush or thicket to form its nest; which is composed of B 3 earth,

earth, moss, and straw, and the inside is curiously plaistered with clay. It lays five or fix eggs, of a pale bluish green, marked with dusky spots. The length of this species is about nine inches, the breadth thirteen inches and an half, and the weight three ounces. It breeds early in the spring, the young being frequently hatched in the beginning of April. In Silefia, these birds build their nests in April and May, on the branches of trees and shrubs in forests; and usually lay four eggs. Sometimes they repair thither from distant countries, and are so numerous in the forests and on the mountains, that they not only afford present food for the inhabitants; but they roaft them, and afterwards pickle them in vinegar, in order to preserve them for future repasts: they are taken with inares made of white horse-hair, baited with berries of the white forbet-tree.

## THE RED-WING.

THE red-wing greatly refembles the throftle, but is confiderably smaller, weighing only two ounces and a quarter. The colours of both are nearly 'the fame, except that the fide, under the wings and the inner-coverts are of a reddish orange in this bird, and yellow in the throftle. Above each eye a line of yellowish white passes from the bill to the hind-part of the head. The vent seathers are white. The red-wing appears in Great-Britain a few days before the field-fare, and comes from the same countries in very large slocks. They have a disagreeable piping note with us, but in Sweden, they perch on the top of some tree, and sing most agreeably during the spring. They build their nests in hedges, and lay sive or six bluish green eggs, spotted with black. This bird is sometimes called the swine-pipe, or wind-thrush.

## THE STARE OR STARLING.

THE starling may be distinguished from the rest of this tribe, by the glossy green of its seathers in some lights, and the purple in others. The weight of the male species is above three ounces, and that of the semale somewhat less. The length is eight inches and an half, and the breadth sources inches and an half. The seathers on the head, neck, and

upper-part of the back are black, varied with a most beautiful green and purple as opposed to different lights. The tips of the feathers on the head are of a yellowish brown, and those on the neck are white: they are of a singular form, being long, narrow, and pointed. The lower-part of the back, the rump, the coverts of the wings, and the lower-part of the breast are black, glossed with green. The tips of the feathers on the breast are white, those of all the rest being yellowish; and the belly is glossed over with a deep purple. The tail is short, and the wings, when closed, reach within half aninch of theend. The legs and feet are black, tinged with red.

The starling breeds in hollow-trees, eaves of houses, towers, ruins, cliffs, and frequently in high rocks over the sea. It lays four or five eggs, of a pale greenish ash-colour; and makes its nest of straw, small sibres of roots, and moss. It has a rougher voice than the rest of its kind, but the desiciency in the melody of its notes, is compensated by the facility with which it is taught to speak. These birds assemble in vast slocks in winter, and feed upon worms and infects. At the approach of spring,

they affemble in fields, as if in confultation together, and seem to take no nourishment for several days: the majority of them leave the country, and the rest breed here. The flesh of the starling is so remarkably bitter as to be hardly eatable.

hardly eatable.

This bird has naturally a wild fcreaming, uncouth note, but it is much efteemed for its aptness in imitating the human voice, speaking articulately, and learning to whistle variety of tunes. A starling, educated under a judicious master, becomes so accomplished as to be sometimes sold for five or fix guineas.

Starlings may be taken at about ten days old, and may be fed in the fame manner as young black-birds. The person who seeds them should, while they are eating, frequently repeat such words as he would choose to have them learn, and he will find them very apt scholars. Many persons slit their tongues, imagining it will enable them to talk more articulately, but it is a most ridiculous practice, and only tortures the poor animal without being of the least service.

Though naturally a hardy bird, it is fubject to the cramp and fits, when confined

fined in a cage. Sometimes it is to fuddenly feized, that it will fall from its perch and beat itself to death in a few moments: a spider or meal-worms are a good remedy against these complaints, and should be administered twice or thrice a week; each dose to consist of about three.

# THE BLACK AND WHITE INDIAN STARLING.

THIS bird has a sharp-pointed bill, thickish at the base, bowed a little downward, and of a yellowish orange: the forehead next the base of the bill above is white; but the top of the head, the throat, and neck are black, with a greenish gloss. The back, rump, the upper-part of the wings, and the tail are blackish; but the ridge of the wings next the breast is whitish, and the outer edges of the great quills are of a lighter brown than the other parts. The tips of the row of covert feathers next above the quills are white; and the breaft, belly, thighs, and covert feathers under the tail are white. A line, of a palish brown colour, runs on the fides of the upper-part of the. breaft,

breaft, forming a ring round the lowerpart of the neck behind, and the legs and feet are of a reddish brown. This is an inhabitant of Bengal.

# THE YELLOW INDIAN STARLING.

THE bill of this bird is shaped like that of the common starling, of a red-dish brown at the base, becoming gra-dually more dusky towards the point. The iris of the eyes is of a hazel co-lour, encircled with yellow, and the pupils are black. The forehead, from the bill to the eyes, is of a bright yel-low, and the eyes are surrounded with dusky feathers: the top and sides of the head are black. The throat is whitish, the breast of a light yellow; the belly, thighs, and coverts are of a deeper yellows and the throat and breast have long dusky spots down the shafts of the seathers. The upper part of the neck, back, rump, and coverts on the upper part of the tail are of a bright yellow: the greater quills of the wings are dufky, edged with yel-low on their outer webs: all the covert feathers on the upper-fide are yellow, with

with dusky spots in the middle of each. The middle feathers of the tail are dusky, tinctured with yellow, having yellow tips; and the legs and feet are dusky. This bird inhabits Bengal in the East-Indies.

## THE AMERICAN MOCK-BIRD.

THIS is the favourite songster of a region, where the birds excel rather in the beauty of their plumage, than the sweetness of their notes. It is much inferior in beauty to most of the feathered inhabitants of that country, but it has qualifications that render it more amiable. It is about the fize of a thrush, has a reddish bill, and the colours of its feathers are white and grey. Exclusive of its own natural notes, which are very mufical and folemn, it can assume the tone of every other animal in the forest, whether quadruped or bird. It seems to delight in leading them aftray. Sometimes it allures the smaller birds with the call of their males, and when they come near, it terrifies them with the screams of the eagle. It can mimick any of the feathered tribe to the greatest exactness, and

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and there is none that has not at times been deceived by its call. Such birds, however, as we usually see famed for mimicking with us, have no peculiar merit of their own, but the mock-bird is ever most sure to please when it is most itself. At those times it frequently visits the houses of the American planters, and passes the whole night on the chimney-top, pouring forth the fweetest variety of notes of any of the feathered creation. So extravagant are some naturalists in their encomiums upon this bird, that the deficiency of other fong-birds in that country feems amply atoned for by this animal alone. It builds its neft in the fruit-trees near houses, feeds upon fruits and berries, and is eafily domesticated.

## THE RING-OUZEL,

THIS is an inhabitant of the mountainous parts of these islands, where they appear in companies of five or fix. They are somewhat larger than a black-bird. In some of them the bill is wholly black, in others the upper-half is yellow: there are a few bristles on each side of the mouth. The feathers

on the head, and the upper-part of the body, are dusky, edged with pale brown: the quill-feathers, and the tail are black. The coverts of the wings, the upper-part of the breast, and the belly, are dusky, slightly edged with ash-colour. The breast is adorned with a white crescent in the middle, with the horns pointing to the hind-part of the neck. This crescent is of a pure white in some, and of a dusky hue in others. Neither the females nor any of the young birds are possessed of this mark, which has occasioned some naturalists to form two species of them. This bird is found in Derbyshire, York-Thire, and other places in the north of England. It is eleven inches in length, and seventeen in breadth.

## THE WATER-OUZEL.

THIS bird is also called the water-crake. It frequents small brooks, particularly those that run through a rocky country. It is of a very retired nature, and is never seen but single, or with its mate. It makes its nest in holes in the banks, and lays sive white eggs, adorned with a sine blush of red.

It feeds on small fish and insects; and, though it is not web-footed, and the whole form of the body denotes it to be a land-fowl, yet it will dart itself quite under the water after fish. The neft is curiously constructed of hay and the fibres of roots, and lined with oak-leaves; to which it has a grand entrance made of moss. This bird is frequently feen in the northern counties, and particularly in Wales. It is seven inches in length, and eleven in breadth, and weighs about two ounces and an half. The bill is narrow, the eye-lids are white; the head, cheeks, and hind-parts of the head, are dusky: the back, the coverts of the wings, and the coverts of the tail are also dusky, bordered with bluish ash-colour: the throat and breast are white, and the belly of an iron colour. The legs are of a pale blue before, and black behind. When it is fitting, it often flirts up its tail, which is short and black.

#### THE INDIAN OUZEL.

IN shape and fize this bird resembles the jack-daw. The breast is red, and the upper-part of the body entirely C 2 black,

black, except that the feathers near the rump are edged with white. The bill is like that of the black-bird, and the tail also resembles that of the blackbird.

#### THE BRASILIAN OUZEL.

'THIS bird is of a deep red all over the body, except the tail, which is blackish. The bill is short, like that of a sparrow; the tail is long, and the feet and legs black.

The party-coloured ouzel is principally of two colours, namely blackish, and a yellowish red. There is another, with a red line near the bill, which in other respects resembles the former.

other respects resembles the former.

#### THE NIGHTINGALE.

"THE nightingale," fays Pliny, that for fifteen days and nights hid in the thickest shades, continues her note without intermission, deserves our attention and wonder. How surprizing that so great a voice can reside in so small a body! Such perseverance in so minute an animal! With what a musical propriety are the sounds it produces

duces modulated! the note at one time drawn out with a long breath, now stealing off into a different cadence, now interrupted by a break, then changing into a new note by an unexpected transition, now seeming to renew the same strain, then deceiving expectation! she sometimes seems to murmur within herfelf; full, deep, sharp, swift, drawling, trembling; now at the top, the middle, and the bottom of the scale! In short, in that little bill feems to reside all the melody which man has vainly laboured to bring from a variety of musical instruments. Some even seem to be possessed of a different fong from the rest, and contend with each other with great ardour. The bird overcome is then seen only to discontinue its song with its life \*.

The nightingale takes its name from night, and the Saxon word galan, to fing; expressive of the time of its harmony. It is about the fize of the red-start, but slenderer, longer bodied, and more elegantly formed. The head and back are of a pale tawny, dashed with olive: the throat, breast, and upper-part of

<sup>\*</sup> Plin. lib. x. ch. 29.

the belly are of a light gloffy ath-colour, and the lower-belly almost white. The exterior webs of the quill-feathers are of a dull reddish brown: the tail is of a deep tawny red. The legs and feet are of a deep ash-colour. The irides are hazel, and the eyes remarka-

bly large and piercing.

This bird, the most celebrated of the feathered tribe, for the variety, length, and sweetness of its notes, visits England in the beginning of April, and leaves it in August. It is found only in some of the fouthern parts of the country; being totally unknown in Scotland, Ireland, or North-Wales. With us they frequent thick hedges, and low coppices; usually keeping in the middle of the bush, and confequently are but seldom seen. They begin their song in the evening, and generally continue it the whole night. For weeks together, if undifturbed, they fit upon the same tree; and Shakespear rightly describes the nightingale fitting nightly in the same place. The nightingale was the savourite bird of Milton, who often introduces it, and usually expresses its love of folitude and night. He thus describes

describes the approach of evening, and the retiring of all animals to their repose.

Silence accompanied; for beaft and bird, They to their graffy couch, thefe to their nefts Were flunk, all but the wakeful nightingale, She all night long her amorous descant fung.

Eve, in the night preceding her fall, cheams she is reproached in the following terms, with losing the beauties of the night, by indulging too long a repose:

Why sleep'st thou, Eve? Now is the pleasant time, The cool, the silent, save where silence yields To the night-warbiing bird: that now awake Tunes sweetest his love-labour'd song.

Nightingales fing the nuptial fong of Adam and Eve, in the following rapturous lines.

The earth
Gave figns of gratulation, and each hill;
Joyous the birds; fresh gales and gentle airs
Whisper'd it to the woods, and from their wings
Floring, till the amorous bird of night
Song spould, and bid hase the evening star
On his hill-top to light the bridal lamp.
These lul'd by nightingales, embracing stept;
And on their naked limbs the slowery roof
Shower'd roses, which the morn repair'd.

From

From Pliny's description of the mightingale, it might be imagined that it was possessed of a persevering strain: this indeed is the fact with regard to the nightingale in Italy; but in our hedges in England, the little songstress is by no means so liberal of her music. Her note is soft, various, and interrupted. She so frequently pauses, that the pausing song would be the proper epithet for this bird's music with us; which is more pleasing than the warbling of any other bird, because it is heard at a time when all the rest are silent.

The nightingale builds its nest about the beginning of May: it is composed of straw, mois, and the leaves of trees; and its situation is usually near the bottom of hedges, where the bushes are thickest and best covered. It is indeed so cunningly secreted, that it generally escapes the penetrating eye of the school-boy. The nightingale lays four or five eggs, which are of a brown nutmeg colour; but, in our cold climate, the whole number is seldom hatched.

The sweetness of this bird's music has induced many to abridge its liberty

to be secured of its song. Its notes, however, in captivity are less alluring. Gesner indeed allows it to be the most agreeable fongster in a cage, and assures as that it is possessed of a most admirable faculty of talking. He even relates a long dialogue which passed between two nightingales at an inn in Ratif-Bon, in which not only the human woice was most admirably imitated, but great fagacity and strength of argument were displayed on both sides. Thus it is when we have high reputation for any one quality, the world is then ready enough to give us fame for others to which we have very small pretentions.

The nightingale feldom fings near its mest, lest it should be discovered by that means. It frequents cool and shady places, among small groves and bushes; but it delights in no high trees, except the oak. Young nightingales should not be taken from the mest, till they are almost as well sledged as the old ones; and though, when they are old, they are apt to be fullen, and refuse their meat, yet their mouths are easily opened; and when they are thus forcibly sed for a few days, they begin

begin to be reconciled to their fituation, and voluntarily take their food.

#### THE ROBIN RED-BREAST.

THE fong of the red-breaft is remarkably fine and foft; and the more to be valued, as we enjoy it the greatest part of the winter, and early in the spring. The note of other birds is louder, and their inflections more capricious; but the voice of this bird is tender, delicate, and well supported. During the spring, the red-breast haunts the grove, the garden, and the wood-In winter, when there is a scarcity of provision, it will even enter houses to feek its food; and is remarkably fociable with mankind, though so extremely petulant as to be at constant war with its own tribe.

The nightingale, the swallow, the tit-mouse, and most of the soft-billed birds, leave us in the winter, when there ceases to be a plentiful supply of insect sood; but the red-breast remains continually with us, and endeavours to support the samine of winter, by chirping round the warm habitations of mankind, by coming into those shel-

ters

ters where the rigour of the feafon is artificially expelled, and where fome few infects are to be found, attracted

by the same eause.

In some countries, the red-breast builds in the crevice of some mossy bank, or at the foot of an hawthorn in hedge-rows; in others it chooses the thickest coverts, and conceals its nest with oak-leaves. The nest is composed of coarse materials; the outside confists of dry green moss, inter-mixed with coarse wool, small dry sticks, straws, dry leaves, and peeling's from young trees; with a few horsehairs within fide. It usually lays five or fix eggs, which are of a cream-co-lour, fprinkled all over with fine reddish spots; which are so numerous at the blunt end that they almost appear as one.

The bill of the red-breast is dusky; the forehead, chin, throat, and breaft, are of a deep orange-colour. The head, the hind-part of the neck, the back, and tail, are of a deep ash-colour, tinged with green. The wings are rather darker, with the edges of a yellowish hue. The legs and feet are duíky.

In a confined flate, these birds are subject to the cramp and giddiness, for the cure of which meal-worms are effectual. There are many kinds of infects which birds will greedily deyour, and which would probably relieve them under their maladies, could they be at all times conveniently procured: fuch as young smooth caterpillars, for a red-breast will not touch one that is hairy, and some forts of spiders, ants, &c. but no insect is more innocent, or agrees better with birds in general than the meal-worm, which may at all times be procured at the meal-shops. A little liquorice, or faffron in their water, will make them long-winded, and affift them in their fong. A young red-breast, brought up from the nest, may be taught to pipe or whistle delightfully; but an old bird is apt to be sullen, though he may be induced by degrees to exert his powers.

#### THE RED-START.

THIS bird appears among us only in the fpring and fummer, and visits us almost at the same time with the nightingale.

It makes its nest in hollow-trees, holes in walls, and other buildings; it is formed of moss on the outside, and lined with hair and feathers. red-start lays four or five eggs, which resemble those of the hedge-sparrow, but are imaller, and of a paler blue. It is so remarkably shy, that it will forfake its nest if the eggs are only touched; and if the young ones are touched, it will either starve them, or throw them out of the nest. It has a delicate soft note; but, being a sullen bird, it is difficult to keep it alive in confinement. It will fing by night as well as by day, and will learn to whistle, and imitate other birds.

These birds breed in May, and their young are generally fit to be taken about the middle of that month. When taken young, they should be kept warm, and managed like the nightingale.

The bill and legs of the male redftart are black, and the forehead white. The crown of the head, the back part of the neck, and the back, are of a deep blue-grey: the cheeks and throat are black; the breaft, rump, and sides are red; the wings are brown, the two middle feathers of the tail are brown, D

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#### 26 The Indian RED-START.

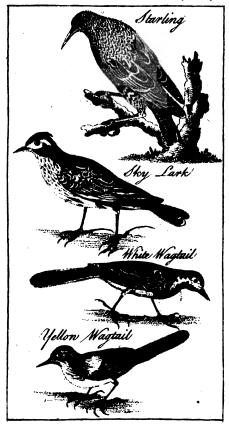
and the others red. The top of the head and back of the female are of a deep ash-colour; the rump and tail of a duster red than those of the male,

and the breast of a paler red.

Gesner mentions three sorts of redftarts, one of which is the same with that which we have described above; the second has a red tail; and the third, which is seen about Strasburgh, is blue at the upper-part of the breast, and of a yellowish red at the bottom: the belly is of an ash-colour, and the legs brown.

#### THE INDIAN RED START.

THE bill of this bird is dusky at the base, and black at the point. The top of the head is covered with long, soft, black feathers, hanging over behind in the form of a crest; and under each eye is a scarlet spot. The throat, breast, belly, and thighs are white; but the sides of the neck and breast are black. The hind - part of the neck, the wings, and tail are of a dark brown; and the ridge of the wing next the breast is whitish: the feathers about the vents, and the coverts beneath the



tail are of a fine red colour; but the legs and feet are black. It is a native of Bengal.

#### THE SKY-LARK.

THE music of any bird in captivity produces no very pleasing sensations: it is but the mirth of a little animal, insensible of its unfortunate situation. It is the landscape, the grove, the contest upon the hawthorn, the fluttering from branch to branch, the foaring in the air, and the answering of its young, that gives a true relish to the song of a These united, improve each other, and raise the mind to a state of the highest and most innocent exulta-How delightful to behold the lark warbling upon the wing! raifing its notes as it foars, till it feems loft in the immense heights above us; the note continuing, though the bird has difappeared! To see it afterwards descend-ing, with a swell as it comes from the clouds, yet finking gradually as it approaches its neft, the spot where all its affections are centered, is pleasing beyond expression.

2 The

The sky-lark and the wood-lark are the only birds that sing as they sly: the former begins its song before the earliest dawn. Milton, in his allegro, beautifully expresses this circumstance.

To hear the lark begin his flight, And finging startle the dull night, From his watch tower in the skies 'Till the dappled dawn doth rise.

THE lark builds its nest upon the ground, beneath some turf that serves to hide and fhelter it: sometimes in corn-fields, or in pasture of any kind. It lays four or five brown eggs, thickly streaked with spots of a darker brown. It generally has young ones about the beginning of May: while the female is fitting, the male usually entertains her with his finging; and while he rises to an imperceptible height, he never once loses fight, either of his loved partner or the nest, while he is ascending or descending. This harmony continues several months, beginning early in the spring on pairing. In winter, when their fong forfakes them, they affemble in vast flocks, grow very fat, and are taken in great numbers by the bird-catchers.

The sky-lark is about seven inches in length, and twelve and a half in breadth,

and the weight is about one ounce and an half. The bill is flender, the upperchap being dusky, and the lower yellow: there is a yellow spot above the edges: the crown of the head is of a reddish brown, spotted with black; and the hind-part of the head is of an ashcolour. It has the faculty of erecting the feathers of the head. The feathers on the back, and coverts of the wings, are dusky, edged with a reddish brown. The upper-part of the breast is yellow, spotted with black; and the lowerpart of the body of a pale yellow. The legs are dusky, the soles of the feet yellow, and the hind-claw very long and ftraight. The male is diffinguished from the female by being browner, and more particularly by the length of the heel or hind-claw; for Gesner affirms he has feen them above two inches long.

The young of these birds should be taken when they are about ten days old, or sooner, for they quit their nests

very early.

# THE WOOD-LARK.

THIS bird is fix inches and an half in length, from the tip of the bill to D 3 the the end of the tail; and twelve inches and an half in breadth, when the wings are extended. Its weight is about an ounce and a quarter. It is inferior in fize to the sky-lark, and of a shorter and thicker form; the colours are paler, and its note less sonorous, though not less sweet. By these and the following characters, it may be easily distinguished from the common kind: it perches on trees, and whistles like the blackbird; but the sky-lark always fits upon the ground. The crown of the head, and the back, are marked with large black spots; edged with pale reddish brown: a whitish coronet of feathers furrounds the head, extending from eye to eye: the throat is of a yellowish white, spotted with black; the breast tinged with red, and the belly white: the coverts of the wings are brown, edged with a dullish white: the quill feathers are dusky; the first three being white at the exterior edges, and the others yellow. In the common lark, the first and second feathers of the wing are nearly of an equal length; but, in the wood-lark, the first feather of the wing is fhorter than the second: the tail is black, the legs are of a creamcolour.

colour, and the hind claw is very long. Like the common lark, the wood-lark will fing as it flies, and will also exert its finging faculties in the night. It builds on the ground in the same manner as the common lark, but the species is not so numerous. The male is distinguished from the semale by its su-

perior fize.

The wood-lark generally lays four eggs, and produces about four young ones, which are very tender birds, and difficult to be reared; and therefore should not be taken till they are well feathered: they should be kept clean and warm. Some prefer the singing of the wood-lark to the nightingale, and in the months of May, June, and July, it is often mistaken for that bird, especially in hot weather, when the sky is serene, but principally when the females are performing the duty of incubation.

This bird in its wild state feeds upon beetles, caterpillars, and other insects. Apparently sensible of its own melodious song, it will never imitate the note of another bird, unless it be brought up from the nest: then indeed it sometimes submits to learn the song of ano-

ther.

#### THE WHITE-LARK.

THIS bird inhabits the mountains of Lapland, but goes into Sweden in winter. It has a short body and white wings; but the first outward feathers are black, as well as the tail, and the sides are of a pure white. Like the common sky-lark, it never perches upon trees.

#### THE TIT-LARK.

THE tit-lark frequents low marshy grounds, and, like other larks, builds its nest among the grass, laying five or six eggs, which are of a dark brown colour; and its young are fit to take about the beginning of May. Like the wood lark, it sits on trees, and has a remarkable fine note, greatly resembling that of the canary-bird. It is a bird of an elegant and slender shape; sive inches and an half in length, and nine in breadth. The bill is black: the back and head are of a greenish brown, spotted with black; the throat, and lower-part of the belly, are white; the breast is yellow, spotted with black:

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the tail is dusky. The claw on the hind toe is very long, and the feet are of a pale yellow. The cock is yellower than the hen, especially under the throat, on the breast, and legs.

This bird comes with the nightingale about the end of March, and goes about the beginning of September. Like the nightingale, it grows fat before it goes away. If properly attended, it is a hardy long-lived bird.

#### THE CRESTED LARK.

THIS differs from the common lark in being longer in the creft, in being less beautiful, in its not rising so high in the air, and in its not remaining so long there; in its not flying in flocks,. and its frequenting the banks of lakes and rivers. The creft confifts of about feven, eight, or nine feathers; which it can erect, spread, or contract at pleafure. The outer-parts of some of the pinion feathers are of a dusky white or cream-colour; but the throat is beautifully spotted: the breast and belly are of a yellowish white; and the tail is about two inches long, fome of the outer-

# 34 The Lesser Field Lark.

outer-feathers having white borders, others red, and others black.

### THE LESSER CRESTED LARK.

MR. Ray, in his history of English-birds, says this species is to be sound in Yorkshire; but gives only the following brief description of it from Aldrovandus: it is like the greater crested lark, except that it is smaller, and not so brown. For the smallness of its body, it has a considerable tust on its head, and its legs are red. Mr. Bolton, in his list of Yorkshire birds, says this species are very numerous in that county.

#### THE LESSER FIELD LARK.

THIS is larger than the tit-lark; the head and hind-part of the neck are of a pale brown, spotted with dusky lines, which appear but faintly on the neck. The back and rump are of a dirty green; the middle of each feather of the former being marked with black, and those of the latter plain. The coverts of the wings are dusky, edged with white. The throat and breast are yellow;

yellow; the latter being marked with large black spots. The belly is white, and the tail is dusky. The legs are of a very pale brown; and it is strongly distinguished from the tit-lark by the claw on the hind-toe, which is extremely short for one of the lark kind.

#### THE RED LARK.

THIS bird, which was discovered by Mr. Edwards in the neighbourhood of London, is about the fize of the leffer field lark. The head, the hind-part of the neck, and the back, are of a dusky brown. A blackish line passes through each eye, and above that a clay-coloured one. The wings are of a dark brown; and the tail is of the fame colour, except that the interior feathers are wholly white. The under fide, from the bill to the tail, is of a reddish brown, marked with dusky spots: the legs are of a dark brown, and the hind-claw is shorter than that of the common lark. When the wings are gathered up, the third quill feather from the body reaches to its tip, like that of the water wagtail genus.

#### THE BLACK LARK.

THE bill of this bird is of a dusky wellow, and the iris of the eye is yellow. It is entirely of a dusky brown, inclining to black, with a reddish cast, except on the back-part of the head, where there are feathers of a dusky yellow; and on the belly where some of the feathers are edged with white, The legs, feet, and claws are of a dirty yellow. This bird is not often feen in England.

#### THE GRASSHOPPER LARK.

THIS is the bird which Mr. Ray describes as having the note of the grasshopper, though louder and shriller. When it sings it sits on the highest branch of a bush, with its mouth open and straight up, and its wings dischaveled. It is considerably smaller than the tit-lark. The bill, which is slender, is of a dusky colour: the head and the upper-part of the body is of a greenish brown, spotted with black. The quill-feathers are dusky, edged with

with an olive brown: the tail, which is very long, is composed of twelve sharp-pointed feathers; the two longest being in the middle, and the others on each side growing gradually shorter. The breast and belly are of a yellowish white; and the hind claw is shorter and more crooked than is usual among the lark kind.

#### THE WILLOW LARK.

THIS bird is inferior in fize to the grasshopper-lark; but it has exactly the same note and actions. It is annually seen in some willow-hedges in Flintshire, where it continues the whole summer. The head, back, and coverts of the wings are of a yellowish brown, marked with dusky spots: the quill feathers are dusky, except that their exterior edges are of a dirty yellow. The throat is white, and the whole under-side of the body is of a yellowish white: the tail is of a dark brown; the legs are of a yellowish brown, and the hind-claw is short and crooked.

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THE

# THE PETIT LARK.

THIS is smaller than any of the former, and has a slender sharp-pointed bill of a dusky colour. The head, the neck, the upper-part of the body, and the wings, are of a dusky olive-green; but the latter are shaded with black, and have a dusky white border on the two first rows of the covert feathers: the breast, and lower-parts of the body, are of a pale brown, with faintish large spots of black. The tail is about two inches long, and the outermost feathers are white about half way, with dusky edges; but the others are browner, with yellow edges. The feet are of a pale brown, and the claws are long.

#### THE CANARY BIRD.

BY the name it appears that these birds came originally from the Canary islands, but we have them only from Germany, where they are bred in great numbers, and sold into different parts of Europe. When they were first brought into Europe, is not certainly known; but t is certain that about a

century ago they were fold at very high prices, and kept only for the amusement of the great. They have fince been greatly multiplied, and their price

is diminished in proportion.

This bird was originally peculiar to those isles, to which it owes its name; the fame that were known to the ancients by the addition of the Fortunate. The happy temperature of the air, the spontaneous productions of the ground in the varieties of fruits; the sprightly and chearful disposition of the inhabitants; and the harmony arifing from the number of birds found there, procured them that romantic distinction. On the same spot these charming songsters are still to be found, but they are now so plenty among us, that we are under no necessity of crossing the ocean for them.

In its native regions, the canary-bird is of a dusky grey colour, and so different from those usually seen in Europe, that doubts have arisen whether it be of the same species. With us they have that variety of colouring usual in all domestic fowls; some being white, others mottled, and others beautifully shaded with green; but in this country they

they are more esteemed for their note than their beauty, having a high piercing pipe, continuing for some time in one breath without intermission, then gradually raising it higher and higher, with infinite variety. It is certainly one of the finch tribe.

Next to the hightingale, the Canary bird is confidered as the most celebrated fongster: it is also reared with less difficulty than any of the soft billed birds, and continues its song throughout the year; consequently it is rather the most

common in our houses.

In choosing the Canary bird, those are the best in health that appear lively and bold, standing upright upon the perch like a sparrow-hawk, without being intimidated at every thing that stirs. In observing him he should not be approached too near, lest a motion of the hand should disturb him; which, for a short time, will make him appear sprightly and in health; but if he is observed at a proper distance, it may soon be discovered whether it is the essect of sear, or the natural spirit of the bird. If he stands up boldly, without crouching or shrinking his feathers, and his eyes look chearful, and not

not drowfy, there is little doubt of his being a healthy bird; but if, on the contrary, he is apt to put his head under his wing, and ftand all of an heap,

he is certainly disordered.

In choosing a Canary bird, the melody of the song should also be attended to: some of them will open with the notes of the nightingale, running through a variety of that bird's modulations, and with the song of the titlark. Others begin like the sky-lark, and, by a soft melodious turn, fall into the notes of the nightingale. These, however, are lessons taught the Canary bird in its domestic state; but its natural note is loud, shrill, and piercing. Each of these songs have their admirers, but the second is most generally esteemed.

Though they fometimes breed all the year round, they most usually begin to pair in April, and to breed in June and August. The best breed is said to be produced between the English and French birds. Towards the latter end of March, a cock and hen should be put together in a small cage: though they disagree a little at first they will feen become thoroughly reconciled.

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The situation of the room where they are kept, must not deprive them of the benefit of the morning fun; and the windows should not be of glass, but where they may perfectly enjoy the benefit of the free air. The floor of the room should be kept clean, and fometimes gravel or fifted fand should be strewed over it. There should be two windows, one at each end of the room; and feveral perches at proper distances for the birds to settle on, as they occasionally fly backwards and Some place a tree in the forwards. middle of the room, which diverts the birds, and some of them choose to build their nests in it. But care must be taken to secure those nests from falling through; and, if they appear to be in any danger, to tie the tree closer to prevent it.

While the birds are pairing, they are usually fed with soft meat, such as bread, maw-seed, a little scalded rape-seed, and about a third part of an egg, observing to grate the bread and rape-seed very sine. Materials for making their nests, such as hay, wool, cotton, and hair, should be placed in their apartment, in so loose a manner that the

the birds may have no difficulty in collecting what is necessary for their purpose. The male affifts the semale in building the nest, and takes his turn with her in fitting upon the eggs, and feeding the young. They are usually about two or three days in making their nest, and the semale generally lays five eggs, which are hatched at the end of about sourteen days. These birds are fometimes fo extremely prolific, that the female will be ready to hatch a fecond brood, before the first are able to defert the nest. On these occasions she quits the nest and her young, in order to provide herfelf with another to lodge her new brood in. In the mean time the faithful male nurses the young which are left behind, and fits them for a state of independence.

When the young are produced, the parents should be supplied with a sufficiency of soft food every day; and also with cabbage, lettuce, and chickweed; in June shepherd's-purse, and in July and August plantane. They should have no groundfil after the young are excluded. With these delicacies the old ones will carefully feed their young; but when they are able

the Yeed themselves, they are usually taken from the nest, and put into cages. Their food then is the yolk of an egg boiled hard, with an equal quantity of grated bread, and a little scalded rape-seed, bruised till it becomes fine: it may also be mixed with a little maw-seed; after which all may be blended together. They should have a fresh supply of this food every day.

These birds will produce with the goldfinch and linnet, and the offspring is called a mule-bird, because, like

that animal, it proves barren.

# THE SWALLOW,

THE swallow-tribe are all known by their very large mouths, which are always kept open when they sly; they are equally remarkable for their short slender feet, which appear as if they were hardly able to support the weight of their bodies; their wings are immoderately long for their bulk; their plumage is glossed with a rich purple, and their note is a slight twittering, which they seldom exert but upon the wing.

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The peculiar conformation of this tribe seems attended with a similar peculiarity of manners. Infects are their food, which they always pursue slying, In fine weather, therefore, when the infects are most likely to be abroad, swallows are continually upon the wing, and pursue their prey with amazing swiftness and agility. The smaller animals in general find safety by winding and turning, when they endeavour to avoid the greater: the lark thus evades the pursuit of the hawk, and man the crocodile. Insects upon the wing endeavour, in this manner, to avoid the swallow; but nature has admirably sitted this bird to pursue them through the shortest turnings. Besides the uncommon length of wing, it is provided with a long tail, which, like a rudder, instantly turns it in its most rapid motions. It is also possessed. culiarity of manners. Infects are their tions. It is also possessed of the greatest fwiftness, and the most extreme agility.

When the spring begins to rouse the insect tribe from their annual state of torpidity; when the gnat and the beetle put off their earthly robes and venture into air, the swallow returns from its long migration beyond the

ocean. At first it appears but seldom, and slies heavily and feebly; but, as the weather grows warmer, and the number of infects encreases, it gathers activity and strength. A rainy season indeed, by repelling the insects, stints the swallow in its food; it is then seen slowly skimming along the surface of the ground, and frequently resting after a slight of a few minutes. In general, however, it keeps upon the wing, and moving with amazing rapidity. When fair weather appears, the infect tribe feel the genial influence, and make bolder flights; the swallow following them in their aerial journeys, and often rifing to imperceptible heights in the pursuit. At the approach of foul weather, the insects have immediate intelligence, and from the swallows pursuing them near the earth, we are often apprized of the change that will speedily enfue.

Among naturalists, there are three opinions concerning the manner the swallow tribes dispose of themselves, after they have fled from the countries in which they make their summer residence. Herodotus mentions one species that resides in Egypt the whole year;

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Prosper Alpinus afferts the same \*; and Mr. Loten, late governor of Ceylon, declares that those of Java never remove. All of the kind which we have heard of, except these, observe a periodical migration or retreat. The swallows of Norway, North-America, Kamtschatka, the temperate parts of Europe, of Aleppo, and Jamaica, all agree in this one point; of which the reader may be convinced, by having recourse to Pontoppidan's History of Norway, vol. ii. page 98; Catesby's History of Carolina, vol. i. page 51; the History of Kamtschatka, page 162; Russel's History of Aleppo, page 70; and the Philosophical Transactions, No. 36.

A defect of infect-food on the approach of winter in cold countries appears a fufficient reason for the swallows quitting them; but since it is probable that the same cause does not subsist in the warm climates, recourse should be had to some other reason for their vanishing.

ing.

The first of the three opinions has the utmost appearance of probability;

which

<sup>\*</sup> Hift. Egypt, i. 198.

which is, that they remove nearer the fun, where they can find a continual fupply of their natural food, and a temperature of air adapted to their conflictations. M. Adanson has proved beyond contradiction that this is the case with some species of European swallows. We often observe them assembled in vast flocks, on churches, rocks, and trees previous to their departure hence; and Mr. Collinson, and many others have proved that they return in equal numbers. Sir Charles Wager gives the following account of what happened to him in one of his voyages. "Returning home," fays Sir Charles, "in the fpring of the year, as I came into founding in our channel, a great flock of fwallows came and fettled on all me riceins. came and fettled on all my rigging; every rope was covered; they hung on one another like a fwarm of bees; the decks and carving were filled with them.
They feemed almost famished and spent, and were only feathers and bones; but being recruited with a night's rest, took their slight in the morning \*. This very great satigue

Phil. Tranf, vol. ii. part ii. p. 459
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evidently proves that their journey must have been very long, considering the amazing swiftness of these birds: it is probable they had erossed the Atlantic ocean, and were returning from the shores of Senegal, or other

parts of Africa.

The second opinion is supported by great antiquity. Aristotle and Pliny are of opinion that swallows do not remove to any great distance from their summer habitation, but winter in the hollows of rocks, and lose their fea-thers during that period. Many in-genious men have adopted the former part of their opinion; and feveral proofs have lately been produced, that some species, at least, have been discovered in a torpid state. The honourable Mr. Dains Barrington, a few years ago, communicated the following fact to Mr. Pennant, on the authority of the late lord Belhaven, that numbers of fwallows have been found in old dry walls, and in fand-hills near his lord-ship's feat in East-Lothian; not once only, but from year to year. The following account of some swallows on the Rhine was communicated to Mr. Peter Collinson, by Mr. Achard, and

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was read before the Royal Society the,

twenty-first of April, 1763.
"In the latter end of March," says
Mr. Achard, "I took my passage down the Rhine, to Rotterdam. A little below Basil the south bank of the river was very high and steep, of a fandy foil, fixty or eighty feet above the water.

I was surprized at seeing, near the top of the cliff, some boys, tied to ropes, hanging down, doing something. The fingularity of these adventurous boys, and the business they so daringly attempted, made us stop our navigation, to inquire into the meaning of it. The watermen told us, they were fearching the holes in the cliff for swallows or martens, which took refuge in them, and lodged there all the winter, until warm weather, and then they came abroad again.

The boys, being let down by their comrades, to the holes, put in a long rammer, with a screw at the end, such as is used to unload guns; and, twifting it about, drew out the birds. For a trifle I procured some of them. When I first had them, they seemed stiff and lifeless. I put one of them in my bosom, bosom, between my skin and shirt, and laid another on a board, the sun shiraing full and warm upon it: and one or two of my companions did the like.

That in my bosom revived in about a quarter of an hour: feeling it move I took it out to look at it, and saw it firetch itself upon my hand; but, perceiving it not sufficiently come to itself, I put it in again: in about another quarter, feeling it flutter pretty briskly, I took it out and admired it. Being now perfectly recovered, before I was aware, it took flight: the covering of the boat prevented my seeing where it went. The bird on the board, though exposed to a full sun, yet, I presume, from a chillness of the air, did not revive, so as to be able to fly."

Such is Mr. Achard's account, on which the following observations were

made by Mr. Collinson.

"What I collect, from this gentleman's relation, is, That it was the practice of the boys, annually to take these birds, by their apparatus and ready method of doing it; and the frequency of it was no remarkable thing to the watermen. Next, it confirmed my former sentiments, that some of this

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low-tribe go away, and some stay behind, in these dormitories, all the winter. If my friend had been particular, as to the species, it would have settled

that point."

We cannot but assent to the above circumstances, though seemingly contradictory to the common course of nature in regard to other birds. We must therefore divide our belief respecting these two very different opinions, and conclude that one part of the swallow-tribe emigrate, and that others have their winter quarters at home.

The third notion is too amazing and

unnatural to merit the least attention. The first who broached the opinion of swallows passing the winter immersed under ice, at the bottom of lakes, or beneath the water of the fea, was Olaus Magnus, archbishop of Upsal, who very gravely informs us that they are frequently found in clustered masses at the bottom of the northern lakes, mouth to mouth, wing to wing, foot to foot; and that they creep down the reeds in autumn to their subaqueous retreats. That when old fishermen discover fuch a mass, they throw it again into the water; but when young inexperiexperienced ones take it, they will, by thawing the birds at a fire, bring them indeed to the use of their wings, which will continue but a very short time, being owing to a premature and forced revival \*.

Credit has been given to the submerson of swallows by some of our own countrymen; and Klein strongly patronizes this doctrine +. He relates the following history of their manner of retiring, which he received from some countrymen and others. They afferted that fometimes the fwallows affembled in numbers on a reed, till it broke and funk with them to the bottom; and before their immersion they had a dirge of a quarter of an hour's length. That others would unite in laying hold of a straw with their bills, and so plunge down in society. Others again would form a large mass by cling-ing together with their feet, and in that manner commit themselves to the

. When the summer is fairly begun, and more than a sufficient supply of

Derham's Phys. Theol. 349. Pontoppidan's Bist. Norw. i. 99.

<sup>†</sup> Klein Hiff. Av. 205, 200.

food presents itself, the swallow then begins to think of forming a progeny. The nest is built with great industry and art, particularly by the common swallow, which builds it on the tops of chimneys. The martin fixes it to the eaves of houses, or against the sides of lofty door-posts. The goat-sucker, it is said, builds it on the bare ground. The nest is built with mud, well tempered with the bill, moistened with water for the better adhesion; and firengthened by grass and fibres: with-in it is lined, with a door to enter at on one side, not far from the bottom; but the swallow leaves her nest quite open.

The swallow lays five or fix white eggs, speckled with red, and sometimes breeds twice a year. This happens when the parents come early, when the season is peculiarly mild, and when they begin to pair soon. Sometimes they find a difficulty in rearing even a single nest, especially when the weather has been severe, or the nests have been destroyed before they were sinished.

The house, or common swallow, is distinguished from all others, by the extreme extreme forkyness of its tail, and by the red spot on the forehead and under the chin. The crown of the head, the upper-part of the body, and the coverts of the wings are black, glossed with a rich purplish blue. The breast and belly are white tinged with red: the tail is black, and the two middle feathers plain: the others being marked transversely with a white spot near their ends. The tongue is short, broad, and of a yellowish colour, as well as the palate; but the other parts of the mouth are blackish. The eyes are pretty large, and the iris is of a hazel-colour.

When swallows have returned at their usual time, after a severe winter, many of them have perished for want of food, because there were no insects to be found flying in the air. Reaumur assures us, that the swallows which appeared first after the long and severe frost in 1740, all died of hunger. Hence it is evident they always frequent places where they expect plenty of food; and therefore they leave us when the insects that sly the air begin to fail.

THE

# THE MARTIN.

THE martin is smaller than the former, and its tail is much less forked. The head, and upper-part of the body, except the rump, is black, glossed with blue: the breaft, belly, and rump are white; and the feet are covered with a short white down. This is the second of the fwallow kind that appears among us. It builds, as we have already obferved, under the eaves of houses, and its nest consists of the same materials as that of the common swallow, but is not open above like that, having only a small hole at the side for admittance. This species sometimes builds against the sides of high cliss over the sea. It is a later breeder than the common fwallow. This bird is about fix inches in length, and ten and an half in breadth, when the wings are extended.

### THE SAND MARTIN.

THIS is the least of the swallow kind, being only five inches and a quarter in length. The head, and all the upper-part of the body, is mouse-coloured:

loured: the throat is white, encircled with a mouse-coloured ring: the belly is white, and the feet are smooth and black. It builds in holes in sand-pits, and in the banks of rivers, making its nest of hay, straw, and feathers; and lays five or six white eggs.

# THE SWIFT OR BLACK MARTIN.

THIS species is the largest of the swallow kind; but its weight is exceeding small in proportion to its extent of wing: for it only weighs one ounce, and the extent of its wings is eighteen inches: the length of the bird is about eight inches. The feet are so exceeding small, that the action of walking and rifing from the ground is vaftly difficult: nature, however, has made it sufficient amends, by furnishing it with ample means for an easy and continued flight. It is more on the wing than any other swallow, and its flight is more rapid. It breeds under the eaves of houses, in steeples, and other lofty buildings. It is entirely of a sooty colour with a greenish cast, except that the chin is marked with a white spot,

The legs are not only very short and small, but of a very singular structure. The toes, which are four in number, are all placed forward, and the least has only one bone, but the rest have three; in which they differ from those of all other birds. The head is large, the mouth extremely wide, and the bill is very small and weak. It is with difficulty that this bird can raise itself from the ground, on account of the length of its wings, and the shortness of its feet; for which reason it generally rests by climbing against some wall or other building, from which it can easily disengage itself.

The swift makes its appearance in this country about fourteen days after the sand-martin; but differs greatly in the time of its departure, always retiring about the middle of August, it being the first of the genus that leaves

us.

# THE CHINESE SWALLOW.

THIS bird refembles the common fwallow in shape, and, in breedingtime, quits the inland parts and goes to the sea side; where it builds an extraordinary

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ordinary nest, which is reckoned delicious eating in China. These nests are fometimes preserved as a sweet-meat, and fent over to Europe as a great curiofity. They are composed of a certain clammy glutinous fubftance, collected from the furface of the fea; and in these the swallow lays its eggs and produces its young. We have no particular discription of this bird, but the Chinese carry on a considerable trade in their nests, and sell them in many parts of the East-Indies. They are about the fize of a goofe-egg, and of a substance resembling isinglass. is customary to dissolve one of these nests in broth, and then it is thought preferable to any fauce that can be produced.

#### THE AMERICAN SWALLOW.

THIS bird, according to Catefby, has the top of the throat of a brownish black, and the extremities of the feathers of the tail are pointed. They quit Virginia and Carolina, and return about the same time of the year as the English swallows. Catefby supposes they pass to the southern parts in the winter.

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winter, and that they are properly the Brasil swallow.

### THE GOAT SUCKER.

THIS bird is, with great propriety, placed by Klein, among the swallow tribe; who calls it a swallow with an undivided tail. It has most of the characters of this genus, fuch as a very large mouth, a very small bill, and very small legs. It is also a bird of passage, agrees with the swallow tribe in its food, and the manner of taking it: but it differs in the hours of its preying, the goat-sucked flying by night. It feeds on moths, gnats, and chaffers. This bird does not continue long with us; it never makes its appearance here till about the latter end of May, and retires about the middle of August.

These birds are often seen in the woody and mountainous parts of Great-Britain; they begin their flight towards the evening, and make a loud and fingular noise while they are on the wings When perched, it has no other note than a finall iqueat repeated four or five times together. It usually lays two eggs, and iometimes three, on the bare

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bare ground: they are long, slender, and whitish, marbled with reddish brown.

Though the colours of these birds are plain, they have a beautiful effect from the elegance of their disposition, consisting of black, prown, grey, white, and iron colour, disposed in streaks, spots, and bars. The male is distinguished from the semale, by an oval white spot near the end of each of the three first quill seathers; and another on the two outermost feathers of the tail.

The weight of the goat-fucker is two ounces and an half, the length ten inches and an half, and the breadth twenty-two inches. The irides are hazel; the bill is about one third of an inch long; the gape of the bill, when opened, is near two inches from tip to tip: the tongue is very small, and placed low in the mouth: the legs are small, scaly, and feathered below the knees. The middle toe is connected to those on each side, by a small membrane reaching to the first joint: the claw of the middle toe is broad and thin.

THE

### THE BLACK CAP.

THIS is one of the smallest of the tribe, and does not weigh above half an ounce. The male is black on the crown of the head, and the hind-part of the neck is of a light ash-colour. The back and coverts of the wings are of a greyish green: the quill feathers and the tail are dusky, edged with a dull green: the breast and the upperpart of the belly are of a pale ash-coour, and the legs are of a lead-colour. The female is distinguished from the male by the spot on the head, which in that is of a dull rust-colour. This is a bird of passage, leaving us before winter. It fings so finely, that in Norfolk it is called the mock-nightingale. It lays about five eggs of a pale reddish brown, mottled with a deeper shade, and fprinkled with a few dark spots.

### THE PETTY CHAPS.

THIS bird is not quite so large as the linnet: the bill is black; the head, neck, back, wings, and tail are ash-coloured inclining to green: the quill

feathers are of a mouse-colour, edged with green. The inner coverts of the wings are yellow. The lower parts are all white, or of a silver colour; except the breast, which is darker, and has a yellowish cast. The inside of the mouth is red, and the legs are of a lead-colour. This bird is found principally in Yorkshire, and Italy; and among the Italians it is called the beccasigo.

### THE FLY-CATCHER.

THE weight of this bird is about twelve drams: it has an oblong bill, of a reddish tawny colour: its head is of a deep brown, mixed with ash-colour, and the cheeks are marked with oblong spots of a dirty-white. The back and coverts of the wings are dusky, edged with reddish brown. The quill feathers and the tail are dusky t the rump is brown, tinged with green : the throat and the breast are of a dull ash-colour; the belly is of a dirty white; and the fides, thighs, and vent feathers are of a pale tawny brown. The legs and feet are of a dark flesh-colour. This bird frequents low nedges, particularly in gardens. It builds  $G'_2$ 

### 64 The HEDGE-SPARROW.

builds its neft in a small bush, and lays four or five eggs of a fine pale blue colour. The male has a short, and very sweet note, but only during a few months in the spring.

### THE BLUE FLY-CATCHER.

THE bill of this bird is black; the crown of the head, the back part of the neck, the back, rump, and covert feathers of the wings are blue, inclining to flate colour; the tail, and quill feathers of the wings are dufky, but the outer quills are white at the bottom: the throat, and fides of the head, are black, and the same colour extends from each fide of the neck to the wings: the covert feathers under the tail are entirely white, and the legs and feet are of a dufky brown colour. It is a native of America, and probably a bird of passage,

### THE HEDGE-SPARROW.

THE weight of this bird is about twelve drams: its head is of a deep brown, mixed with ash-colour, and the cheeks are marked with oblong spots of dirty white: the back and coverts coverts of the wings are dusky, edged with reddish brown; the quill feathers and the tail are dufky; and the rump is brown, tinged with green. The throat and breaft are of a dull aftcolour, and the belly is of a dirry white. The fides, thighs, and vent reathers are of a pale tawny brown. The legs are of a dull flesh-colour. This bird is as well known as any of our small birds, and it builds so conficienced in finall birds. fpicuously in small bushes, that any boy who searches the hedges, can give an account of its nest, eggs, &c. It lays four or five eggs, of a fine pale blue-colour. The male has a short, but very sweet note during a very small space in the spring. Linnæus seems to have been unacquainted with this species: the bird which he supposes to be our hedge-sparrow, and describes under the title of motacilla curruca, differs in colours of plumage as well as eggs. The hedge-sparrow ought to be more esteemed, as he has a variety of agreeable notes: many persons, who have kept them in cages, have been much delighted with their finging; but these birds are less valued on account of their being fo exceeding plenty, as we G 3 perperceive by daily experience, with regard to many other articles of convenience or pleasure. The hen is known from the cock by a fainter breast, and by being of a brighter colour on the back. The nest of the hedge-sparrow consists of fine green moss, plaited with a little wool and hair. The female has young ones at the end of April or the beginning of May. The young should be taken at nine or ten days old. should be taken at nine or ten days old, and fed with bread and slesh-meat chopped very fine, mixed together, and made moift. If the cock hedge-spar-Tow is brought up under some fine song-bird, he will take his song, and give great satisfaction; this bird has a long flender black bill, with a horny cloven tongue, and black at the tip. The iris of the eyes is hazel, and the ears are wide.

### THE WREN.

THE wren weighs about three drams, and is four inches and an half in length from the tip of the bill to the end of the tail. The head and upper-part of the body is of a deep reddish brown; and above each eye is a stroke of white: the back, the coverts of the wings, and the tail, are marked with slender trans-

werse black lines; and the quill feathers with bars of black and red. The throat is of a yellowish white. The belly and fides are croffed with dufky and pale reddish brown lines. The tail is crossed with dusky bars. The wren may be placed among the finest of our finging birds, though its note continues only during the breeding season. makes a curious nest of an oval shape, very deep, and with a small hole in the middle for egress and regress: the external part confifts chiefly of moss, but it is lined with hair and feathers: this bird lays a great number of eggs, generally from twelve to eighteen: they are white, sprinkled all over with pale reddish spots. Mr. Ray observes, that it is one of those daily miracles which we take no notice of, that a wren should produce so many young, and feed them all without passing over a single one, and that too in total darkness. The wren breeds twice a year, namely in April and June, and the young should be fed and reared like young nightingales.

The wren usually creeps about hedges and holes, making but short slights, and, if it be driven from the hedges, may

be easily tired and run down.

THE

### THE WILLOW-WREN.

THE weight of the willow-wren is about two drams: the upper-part of the body is of a dusky green: the wings and tail are brown, edged with yellowish green. There is a yellowish ftroke above each eye: the breaft, belly, and thighs vary in their colour in dif-ferent birds; they are of a bright yellow in fome, and almost white in others. It builds in hollows in the fides of ditches, and makes its nest in the form of an egg, with a large hole at the top as an entrance: the outfide confifts of moss and hay, and the inside is lined with foft feathers. It usually lays seven eggs, which are white marked with rust-coloured spots. It has a low plaintive note, and is perpetually creeping up and down the bodies and boughs of trees. It frequents large moist woods, and those places where willow trees abound.

### THE GOLDEN CRESTED WREN.

THIS is the smallest of all the British birds, not weighing above twenty-

fix grains. It is about three inches and an half in length, and five inches in breadth: it is distinguishable from all other birds, not only by its fize, but by the beautiful scarlet mark on the head, bounded by a fine yellow line on each fide. The bill is dufky; the feathers of the forehead are green; and a narrow white line extends from the bill to the eyes: the hind-part of the neck and the back are of a dullish green: the coverts of the wings are dusky, edged with green, and tipt with white. The quill feathers and the tail are dusky, edged with pale green. The throat and belly are white, tinged with green: the legs are of a dull yellow, and the claws are very long. It frequents woods, and is usually scen in oak-trees. Though so very small a bird, it endures our winters. The note of this wren, does not differ greatly from that of the common wren.

### THE RUBY-CROWNED WREN.

THIS is a native of North-America, particularly of Penfylvania. The bill is black: the head, back-part of the neck, back, and rump are of a darkish olive-

olive-green; but deeper on the head, and lighter on the rump. It has a fpot of exceeding fine red, or ruby colour, on the top of the head, from whence this bird has its name: the breaft and belly are of a lightish yellow, or cream-colour. The covert feathers of the wings are of an olive-colour with cream-coloured tips, forming two lines across each wing: the three quills next the back are dusky, edged with cream-colour; the remainder of the quills are also dusky, with narrow greenish yellow edges. The feathers of the tail are blackish, edged with yellowish green, but they are of an ash-colour beneath. The legs, feet, and claws are dusky.

### THE CARIBBEE WREN.

THIS is a native of the Caribbee islands in America, where, on account of its delightful note, it is called a nightingale. It is larger than the common wren, and is the more remarkable for having a fine fong in a country where the birds in general have very disagreeable notes.

### THE WHEAT-EAR.

THE head and back of the male wheat-ear, are of a light grey, tinged with red; and over each eye passes a white line; beneath which a broad black stroke passes each eye to the hind-part of the head: the rump, and lower half of the tail are white; and the upper half is black; the breast and belly are white, tinged with yellow: the quill-feathers are black, edged with reddish brown. The colours of the female are duller, and she wants the black stroke across the eyes. The wheat-ear disappears in September. This bird has its name, in Sussex, from its frequenting the downs in that county in the time of harvest.

These birds begin to visit us about the middle of March, and continue coming till the beginning of May; it being very remarkable that the semales arrive about a fortnight before the males. They frequent warrens, downs, and the edges of hills, especially those that are senced with stone-walls. They breed in cliffs, in old rabbet-burroughs, and sometimes under old timber; mak-

ing

ing their nest of dried grass and horse-hair; and laying from fix to eight eggs of a light blue colour. They grow wery fat in autumn, and are thought so great a delicacy as to be little inferior to an ortolan. They are taken in great quantities by the shepherds about East-Bourne, in Sussex; for which purpose they make snares of horse-hair, and place them under a turf. Wheat-ears are such very time birds, that the motion of a cloud, or the appearance of a hawk, will drive them into those traps for shelter, by which means they are taken. The reason that these birds frequent the neighbourhood of East-Bourne, is because it abounds with a certain fly which are very numerous about the adjacent hills; drawn thither by the wild tyme with which they are covered, which is not only a favourite food of that insect, but the plant on which it deposits its eggs.

Wheat-ears abound in many other parts of Suffex, as well as in the neighbourhood of East-Bourne. In the downs not far distant from Brighthelm-stone, Shoreham, and Arundel, they are found in great numbers; and, during the watering-season at Brighthelm-stone,

stone, the ladies and gentlemen, in their perambulations, frequently find birds in snares that have been laid by the shepherds; which they always take, and deposit a penny in the hole for every bird, as a valuable consideration. This indeed is the settled price, between the shepherds and the nobility and gentry who frequent Brighthelmstone.

### THE WHIN CHAT.

THE head and back of this bird are of a pale reddish brown, regularly spotted with black: it has a narrow white Areak over each eye, and beneath that a broad bed of black, which extends from the bill to the hind-part of the head: the breast, is of a reddish yellow; the belly is whitish, with a reddish tincture, and there are two remarkable white spots on each wing: the lower-part of the tail is white, the two middle feathers excepted, which are wholly black; and the upper-part of the others are of the fame colour. The colours of the female are not fo agreeable. Instead of the white and black marks on the cheeks, she has one broad pale brown one, and she has less Vol. VII. white H

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white in the wings than the male. The bill, feet, and claws of the whinchat are black. This is a bird of paffage, but it is not certain whether it quits this island.

### THE STONE CHATTER.

THIS is also a bird of passage; but it is doubted whether it quits this island; naturalists in general suppose it only shifts its quarters, and does not entirely leave this country. It is a restless noify bird, and frequently perches upon some bush, chattering incessantly. The head, neck, and throat are black; but the latter has a white bar on each fide. and seems, at first fight, to be encircled with white: the feathers on the back are black, edged with tawny; but the fides just above the rump are white: the breast is of a deep reddish yellow, and the belly fomewhat lighter; the quill Ceathers are dusky, edged with a dull red. The head of the female is of an iron colour spotted with black; and the colours in general are less vivid. The legs in both fexes are black.

THE

### THE WHITE THROAT.

THIS bird is about the fize of a linnet, but the body is somewhat longer. The upper-part of the bill is blackish, the lower whitish, and the inside of the mouth is yellow. The head is of a brownish ash-colour, and the throat white: the breast and belly of the male are white, tinged with red; those of the female wholly white. The back and coverts of the wings of both are of an iron-colour; the quill feathers and the tail are dusky, edged with reddish brown. The legs are of a yellowish brown.

The white throat frequents our gardens in summer, and leaves us when winter approaches. It builds near the ground in low bushes; the external part of its nest consists of tender stalks of herbs and dry straw; the middle-part of sine bents and soft grass; and the inside of hair. It lays about five eggs, which are of a whitish green colour, sprinkled with black spots.

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THE .

# THE WHITE WATER WAGTAIL.

ALL the birds of this kind have a very long tail, which is always in mo-tion; on which account they have obtained the name. The white water wagtail weighs about fix drams, and is in length from the tip of the bill to the end of the tail, eight inches; but the breadth, when the wings are extended, is eleven inches. The head, back, and neck, as far as the breaft, are black: in some the chin is white, and the throat marked with a black crescent. The breast and belly are white; the quill feathers are dusky; and the coverts are black, tipt and edged with white. The tail is very long, and continually in motion. The exterior feather on each fide is white, the lower-part of the inner-web excepted, which is dufky: the others are black. The bill, the infide of the mouth, and the legs are black. The back claw is remarkably long.

The white water-wagtail frequents the fides of ponds and small streams, feeding on infects and worms like the

rest of this genus. This bird shifts its quarters in the winter, directing its course from the north to the south of England during that season. In spring and autumn this bird is a constant attendant of the plough, in pursuit of the worms thrown up by that instru-ment. In some places they build their nests under the eaves of houses, and in holes of the walls of buildings, and lay four or five eggs.

# THE YELLOW WATER WAGTAIL.

THIS bird has a straight sharppointed black bill, except at the base of the lower-chap, which inclines to a flesh-colour. The iris of the eyes is hazel. The top of the head, the upper-part of the neck, and the back, are ash-coloured, slightly edged with yellowish green. The male is a bird of great beauty, the breast, belly, and thighs being of a most vivid and beautiful yellow: the throat is marked with fome large black spots. It has a bright yellow line above the eye, and another beneath that of a dusky hue, from the bill across the eye; and beneath the H 3 cyc The head, the upper-part of the neck, and the back, is of an olive-green, which brightens in the coverts of the tail. The colours of the female are more obscure than those of the male, and it wants those black spots on the throat. The legs and feet are of a dusky-colour, and the claw of the hind-toe is pretty long. It makes its nest upon the ground among corn, bents, and stalks of herbs; the inside of which is lined with hair. This bird lays four or five eggs, variegated with dusky spots, and lines irregularly drawn.

### THE GREY WATER WAGTAIL,

IT has a stender straight bill, of a dusky-colour, and ending in a point. The top of the head, the upper-part of the neck, and the back, are ash-co-loured; the space round each eye is ash-coloured; beneath and above which is a line of white. In the male, the chin and throat are black; the feathers incumbent on the tail are yellow; and the tail is longer in proportion to its size than that of any other kind. The break, and the whole under-side of the body are yellow;

yellow: the quill feathers are dufky, those next the back being edged with yellow. In the female, the black spot on the throat is wanting, and the colours in general are more obscure than in the male. The legs, feet, and claws of this bird are of a dusky-colour: it frequents stony rivers, and feeds upon insects.

# THE JAMAICA WATER WAGTAIL.

IT has a small head, and a straight black bill, with a bluish cast towards the base: the head, and lower-part of the neck is black, but the upper part is vellow. The whole of the back, breaft, and lower-part of the belly are also yellow. The wings are black, with a white fpot in the middle; the tail also is black, and the feet are brown. The tail of this bird is near four inches long, which, together with the colour of the feathers, occasioned Mr. Ray to place it among the wag-tails; but Marcgrave Tays it neither feeds nor wags its tail like the birds of this kind abovementioned.

THE

### THE GROSSBEAK.

THIS bird is also called a hawfinch : it is feven inches in length, and thirteen in breadth, and weighs almost two ounces: the bill is in shape like a funnel, strong, thick, and of a dull pale pink colour; at the base of which are fome orange-coloured feathers: the irides are grey; and the cheeks, and the crown of the head are of a fine deep bay: a black line extends from the bill to the eyes; the breast and belly are of a dirty flesh-colour. The neck is ashcoloured, and the back and coverts of the wings of a deep brown; those of the tail being of a yellowish bay: the great quill feathers are black, spotted with white on their inner webs. tail is short, having white spots on the inner-fides, and the legs are of a fleshcolour. The great peculiarity of this bird, is the form of the ends of the middle quill feathers; which resembles, as Mr. Edwards properly observes, the figure of some of the ancient battleaxes. These feathers are glossed over with a rich blue; but are less conspicuous

cuons in the female; her head being of a dull olive, tinged with brown.

The grosbeak is not regularly migrant, vifiting us only in hard winters: they feed on berries, and even on the kernels of the ftrongeft stones, such as those of cherries and almonds, which they crack with the utmost ease; their bills, from their strength and thickness, being well adapted to that work. We are told by Mr. Willoughby, that these birds are common in Italy and Germany, where they live in the woods in summer, and breed in hollow-trees, laying five or six eggs; but that they come down into the plains in winter. Their legs and feet are of a pale slesheolour, and the claws are pretty strong and large.

### THE GAMBIA GROSSBEAK.

THIS bird is about the fize of the hawfinch: the bill is large, and broad at the base, ending in a sharp point, and resembling the figure of a cone. The mouth, which is large, is of an ash-colour in the inside. The pupils of the eyes are black, surrounded with a white iris; the head, and the greatest

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part of the neck are black; ending in a circular black point on the fore-part of the breast. The rest of the body, and the wings and tail, are of a beautiful yellow, shaded with a bright green. The legs and feet are of an ash-colour, with a bluish gloss. These birds abound on the coast of Guinea, in Africa, near the river Gambia.

### THE PURPLE GROSSBEAK.

THIS is about the fize of a sparrow: it has streaks of red over the eyes, on the throat, and near the vent under the tail: all the rest of the body is of a deep purple. The hen has the same red streaks, but the body is brown. This is a native of the Bahama islands.

### THE CROSS-BILL.

THE cross-bill is an inconstant visitant of this island: Gesner informs us that in Germany and Switzerland, it inhabits the pine-forests\*, and breeds in the pine-trees so early as the months of January and February. These birds

<sup>#</sup> Geiner, 59.

feed on the feeds of the cones of pines and firs, and are very dexterous in scaling them; for which purpose the cross Aructure of the lower mandible of their bill is admirably adapted. They also feed on hemp-feed, and the kernels of apples, and are faid to divide an apple with one stroke of the bill, to get at the contents: it is certain that these birds change their colours, or rather the shades of their colours: the males which are red, varying at certain fea-fons to deep red, to orange, or to a kind of a yellow. The females, which are green, alter to different varieties of the fame colour. There are two varieties of this bird, one being confiderably fmaller than the other: the leffer kind are the most common.

### THE BULL-FINCH.

BULL-FINCHES are so called from their heads, which are black, and, in proportion to their bodies, large. In some parts of England they are called popes, in others thick-bills, and in others hoops. They are very docide birds, the hen learning after the pipe or whistle as well as the cock; but its own

wild note is not in the least musical. They excel most birds, however, in what is taught them, and they are remarkable for not forgeting what they have once learned, though they should be placed among several other singingbirds, in the fame room. Some have been taught to speak several words at command, with great propriety of articulation. They are deservedly esteemed, both for their fong, and the beauty of their figure. In the latter they equal any male birds; and in the former, if properly instructed, they excel them. A gentleman in Lancashire had one that could whiftle feveral tunes; and was so well disciplined, that it would obey its mafter's call, and perch on his shoulders; and, when commanded, go through a difficult mufical lesson. Many which are taught to fpeak, are annually brought from Frankfort on the Maine to London, in order to be fold to the best advantage.

The male is distinguished from the female, by the superior blackness of its crown, and by the rich crimson that adorns the cheeks, breast, belly, and throat; those of the semale being of a dirty buff-colour: the bill

bill is short, black, and strong; the eyes are of a hazel-colour, and the head (as already observed) is large in proportion to the size of the body. Part of the neck, shoulders, and back are of a bluish ash-colour, shaded with red, and the belly and rump are white. Some of the quill feathers have their outward webs red, and the inner of a fine gloffy black: others are black, with dufky edges, and of a bluish glofs; and others have their outward edges white, forming a fort of white line or crofs-bar upon each wing. The tail is of a shrining black, and about two inches long; the legs are of a tlufky colour, and the claws are black.

Among young bull-finches it is difficult to discover the cock from the hen:

Among young bull-finches it is difficult to discover the cock from the hen: the most certain method to come at a discovery, is to pull off a few feathers from their breasts when they are about three weeks old, and in about ten or twelve days after, fresh feathers will appear where you have pulled off the others: if they are of a curious red, it is a cock; but if they are of a palish

brown, it is a hen.

In the spring these birds frequent our gardens, and seed upon the tender buds of

of fruit-trees, such as the apple, pear, peach, and other garden-trees. They breed about the latter end of May, or the beginning of June, at which time they are feldom feen near the houses; always choosing some retired place to breed in. Their nests, which are usually built in forests, woods, or parks, are very difficult to be found; and, when they are feen, they are of fo wretched a fabric, that they would not be taken for nests, except by those who are connoisseurs in the nestling of birds. They are composed of a few small flicks placed across each other in a very flovenly manner, and lined with a few fibrous roots. The female lays four or five eggs of a bluish colour, spotted at the largest end with large dark brown, and faint reddish spots.

Young bull-finches should not be taken till they are pretty well feathered; that is when they are twelve or sourceen days old. They should be kept warm and clean, and sed every two hours from morning till night; but they must have but little at a time. Their food should be rape-seed, soaked in water eight or ten hours, and then scalded and bruised: this should be mixed

mixed with an equal quantity of white bread foaked in water, strained, and afterwards boiled thick with milk. It should be fresh every day, for if it is sour, it will do the birds an injury.

The bull-finch is about the fize of the common sparrow. It is so pernicious to fruit-trees, by destroying their tender buds, that in some parts of England a reward is given by the churchwardens for every one that is killed. This may be assigned as one reason of their scarcity; for they are certainly less common than most other singingbirds that breed among us.

### THE SPARROW.

THIS is usually called the house-sparrow. It has a very thick strong bill, about half an inch in length, and the eyes are of a hazel-colour. The trown of the head is grey, and under each eye is a black sput; and above the corner of each is a broad bright bay mark, which surrounds the hind-part of the head. The cheeks are white, the chin and under-side of the neck are black, the latter being edged with white; and the belly is of a dirty

white: the back is spotted with red and black, and the tail is dusky. The lower mandible of the bill of the semale is white. But this bird is so univerfally known that it would be impertinent to give any farther description. It is six inches and an half in length, from the tip of the bill to the end of the tail, and weighs somewhat more than an ounce. It feeds upon grain, and does considerable mischief in the corn-fields.

Sparrows, which are very numerous in this country, are proverbially salacious, and consequently very short-lived birds. They breed early in the spring, making their nests under the eaves of houses, in thatches, in holes of walls, and frequently in the nests of the martin, after expelling the owner. Linnæus tells us (upon the authority of Albertus Magnus) that the martin does not suffer this insult to pass unrevenged; the injured bird assembles its companions, who assist him in plaistering up the entrance with dirt; after which they sly away twittering in triumph, leaving the intruder to perish in his muddy prison.

### THE BLACK SPARROW.

THIS is about the fize of a lark, and has a thick short beak. The iris of the eyes are red. The head, neck, breast, back, and tail are black, but the wing-feathers are edged with white. The breast and belly are white in the middle, on the sides, and lower-parts: the upper part of the wings are of a dark red, and the legs are brown.

### THE AMERICAN SPARROW.

THE back of this bird is of a curious black, the belly white, the head and breast of a fine blue, and the wings and tail of a shining black, with a purple cast. The rump is of a deep green. One of these was sent here from the island of Barbadoes.

### THE GOOD-HOPE SPARROW.

THIS is a native of the Cape of Good-Hope, and has a bill of a palish brown, which is not to strong as in other birds of this kind: the iris of the eyes is of a pale yellowish white:

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and the upper-part of the body, the head, and neck are black; which colour terminates in a point upon the belly; the lower-part of which, as well as the thighs, and the fore-part of the wings being white. The sides of the wings are of a light brown, and some of the quill feathers are black. The colour of the tail is the same as that of the wings, and the legs and feet are of a dusky brown.

There is also a bird called the White Lapland Sparrow of Linnæus, which is of the fize of a lark, and generally weighs about an ounce. Its bill is sharp, conical, and black, though of an ash-colour towards the base; but it is principally remarkable for having teeth on each fide of the palate, at the ori-

fice of the throat.

The Chinese sparrow is less than the house-sparrow, but has no remarkable distinction.

The Little Bahama sparrow is of the fize of a Canary-bird, and the head, neck, and breaft are black; all the other parts being of a dirty green.
The Mountain Sparrow is of the

fize of the common sparrow, but some-

what longer. It is found in mountainous woody places, but is rather an uncommon bird.

The Wood-Sparrow is of a rufty iron-colour on the crown of the head, and has a white space about the eyes. It has also blackish transverse lines running along the chin, and the lower-part of the neck,

### THE GREEN-FINCH,

THE green-finch is fomewhat larger than the common sparrow: the head and back are of a yellowish green. The upper-chap of the bill is of a dufky-colour, and the lower whitish. The rump is of a fine yellow, but the breaft is paler, and shaded with green: the belly is white. The edges of the outmost quill feathers are yellow, the next green, and the farthest grey. The tail is about two inches long, and a little forked: the two middle feathers are dusky; and the exterior webs of the four outmost feathers on both fides the tail are yellow. The colours of the female are much less vivid than in the male.

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These birds are very common in this country. They have young ones about the middle of May: they make their nests in hedges, which are very large considering the fize of the inhabitants; the outside of which consists of hay, stubble, and grass, the middle-part of moss, and the inside of seathers, wool, and hair. The female lays five or six eggs, of a pale green-colour, sprinkled with small reddish spots, which are more numerous at the large end. The green-finch, from the end of the bill to the extremity of the tail, is about six inches and an half, the bill is half an inch in length, and the weight of the bird is sixteen drams.

Though green-finches are frequently kept in cages, they are not much efteemed for their finging; yet some of them, if brought up from the nest, will learn to pipe and whistle, and to imitate the song of most other birds. They are valued by some for their facility in learning to ring the bells in a cage contrived for that purpose. At the beginning of winter, and in hard weather, they assemble in slocks, and may be caught with the clap-nets in great numbers. The young are fit to be

be taken at ten days old. The greenfinch is very eafily tamed.

### THE GOLD-FINCH.

THE gold-finch is a little less than the house-sparrow, weighing about han an ounce; and its length, from the tip of the bill to the end of the tail, is five inches and an half: the breadth, when the wings are extended, is nine inches. It is one of the most beautiful of the hard-billed fmall birds, whether we confider its colours, the elegance of its form, or the music of its note. The bill is white, tipt with black, the base being furrounded with a ring of rich scarlet feathers: a black line extends from the corners of the mouth to the eyes: the cheeks are white, and from the top of the head a broad black line passes on each side almost to the neck, The hind-part of the head is white: the back, rump, and breast are of a fine pale tawny brown, rather lighter on the two latter. The belly is white, and the wings and tail black, but the points of the chief feathers are white in both: a beautiful yellow stripe runs across the wings. The tail is about two two inches long, and of a black-colour, but often the feathers are marked with a white spot near their ends. The

legs are white.

The cock is diftinguished from the by the feathers on the ridges of the wings, which are of a deep black, and those of the hen are of a dusky brown: the black and yellow in the wings of the female are also less brilliant than in those of the male. The young bird, before it moults, is grey on the head, and is therefore termed a grey-pase by the bird-catchers.

The gold-finch begins to build in April, when the fruit-trees are in bloffom. As they excel the other small birds in beauty of feathers, so do they likewise in ingenuity: their nest is small, but extremely beautiful: the outside consists of very fine moss, curiously interwoven with other materials, and the inside is lined with fine down, which has the appearance of cotton. The gold-finch lays five or six white eggs, marked with deep purple spots on the upper-end. This bird is fond of orchards, and frequently builds its nest in an apple or pear-tree.

Gold-

Gold-finches are of a mild and gentle nature, and almost as soon as they are taken are easily prevailed on to eat and drink; nor are they so much affrighted at the presence of man as birds are in general. They are also reconciled to their imprisonment in a cage; and after they have remained there a confiderable time, they become so fond of it, that if the door of the cage is opened they will not fly away, but usually fly to the cage for shelter if any thing should terrify them.

In some parts of England they are called draw-waters, from their facility in learning to draw their water when they are inclined to drink; for which purpose they are sometimes surnished with a little ivory-bucket, fastened to a small chain. It is entertaining to see with what dexterity these little creatures pull up their bucket, drink, and return it. They are much delighted with viewing themselves in a looking-glass, which is sometimes fixed to the back of their bucket-board. They will fit upon their perch, pruning and dreffing themselves with the greatest care imaginable, looking incessantly in the

the glass to see that every feather is

placed in the nicest order.

The gold-finch is a long-lived bird, and sometimes reaches the age of twenty years: Mr. Willoughby mentions one what lived twenty-three years. To-wards winter these birds affemble in flocks, and feed on feeds of different kinds, particularly those of the thistle. Their note is very sweet, and they are much esteemed on that account, as well as for their beauty, and their great docility.

The young are tender, and therefore should not be taken out of their nests till they are pretty well feathered. If a young gold-finch is brought up under a Canary bird, a wood-lark, or any other finging bird, he will readily take their fong. A cock gold-finch, bred from the nest, will couple with a hen Canary bird, and their eggs will produce birds between both kinds; partaking of the fong and colours of both; but the young will be barren.

There is an American bird called the American gold-finch, by Catefby: it is black on the forehead, and about the eyes; the wings are of an earthy colour, edged with straw-colour, and fringed. fringed. The tail is black, with a yellowish cast, and the other parts are yellow.

### THE CHAFFINCH.

THE chaffinch is a hardy well-known bird, and about the fize of the bull-finch. It entertains us agreeably with its fong very early in the year; but, towards the latter end of fummer, assumes a chirping note. Its nest is almost as elegantly constructed as that of the gold-finch, and nearly of the same materials, except that the inside is lined with feathers and hair instead of down. It lays four or five eggs of a whitish colour, tinged and spotted with deep purple.

This bird is lavish in its song, and, when brought up from the nest, will sing six or seven months in the year; but in its wild state not above three

months.

It has a strong bill of a pale blue-colour, and black at the tip, as well as at the upper-part: the crown of the head, the hind-part and the sides of the neck are of a bluish grey; the breast is red; the sides and belly are white, tinged K with

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with red; the upper-part of the back is of a deep tawny colour; the lower-part, and rump, are green. The colours are much stronger, and more lively in the male than in the female; and fome of the quill-feathers have white webs, with green edges, shaded with yellow: the small feathers on the ridges of the wings are blue, spotted with white. The tail is black, except the outmost feather, which is marked ob-Equely with a white line from top to bottom; and the next, which has a white fpot on the end of the inner-web. The legs are dusky. The female wants the red on the breast, and other parts; the head and upper-part of her body are of a dirty green; and the belly and breast of a dirty white.

The young of the chaffinch may be taken at about ten days old, for as they are hardy birds, they are easily brought up. Some bird-catchers, not satisfied with depriving the little innocent creatures of their liberty, exercise the eruelty of putting out the eyes of the chaffinch, because they say he is then more attentive, and learns more expeditiously: this wicked experiment is done with a wire made almost red-hot.

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hot. It is however affirmed that this cruel operation answers no other purpose than that of rendering the opera-tor detestable, for rewarding the bird's endeavours to please him, with tempotary torture and perpetual blindness.

It is very fingular that in Sweden, the female chaffinches quit that country in September, migrating in flocks into Holland, and leaving their mates behind \*.

#### THE BRAMBLING.

THIS is a common bird in this country, but is chiefly found in the woody parts: it is larger than the chaffinch; the top of the head is of a gloffy black, edged with a yellowishbrown; the feathers on the back are of ahe same colour, but the edges are more deeply bordered with brown: the chin, throat, and breaft, are of an orange-colour: the leffer coverts of the wings are of the fame colour; but those on the quill-feathers are barred with black, and tipt with

K 2 orange.

Amen. Acad. ii. 42. iv. /595.

orange. The tail is a little forked, and the exterior web of the outer-feather white: the others are black, except the two middle ones, which are edged and tipt with ash-colour.

## THE SISKIN.

THE head of this bird is black, and the upper-part of the body green, except that the shafts of the feathers on the back are blackish. The rump is of a yellowish green, but the throat and breast are paler. The belly is white, and the feathers under the tail are yellowish, with oblong brown spots: the wings are marked with a transverse spot, of a yellowish-colour. The two middle feathers of the tail are black; the rest above half-way are of a most beautiful yellow with black tips. The colours of the female are paler; her throat and sides are white spotted with brown; and her head and back are of a greenish ash-colour, marked also with brown.

We are told by Mr. Willoughby that this is a fong-bird, and that in Suffex it is called the barley-bird, because it visits them in the barley-feed time. The siskin does not breed in these islands,

Mands, but comes hither in autumn and departs in the spring. It feeds in the same manner as gold-sinches and linnets, and is frequently seen upon elder trees. It is to be met with in the bird-shops in London, and being rather a scarce bird, sells at a higher price than the merit of its song deserves.

#### THE LINNET.

THE length of this bird, including bill and tail, is five inches and an half; of which the former is half an inch. and the latter two inches and a quarter. It weighs about ten drams. The bill is dusky, but in spring it assumes a bluish-cast: it is thick, strong, and about half an inch in length: the head is variegated, with ash-colour and black, and the back is of a blackish red; the bottom of the breast is of a fine red, and the lower-part of the belly yellowish. The lower-part of the throat is of a beautiful red, and the edges of its feathers of a yellowish ted: the tail is a little forked, and of a brown-colour, edged with white, the two middle feathers. excepted, which are bordered with a dullish red. These K 3 birds birds are much efteemed for their fong; they feed on feeds of different kinds, which they peel before they eat: the feed of the linum or flax is their favourite; from whence arose the name of the linnet tribe.

They usually build in a thick bush or hedge, particularly among white thorn or furze. The outfide of their nefts is or furze. The outfide of their nests is composed of moss, bents, and dry weeds; the inside of fine soft wool or cotton, mixed with a kind of down, gathered from dried plants, and a sew horse-hairs. They lay four or sive whitish eggs, spotted like those of the gold-finch. The young ones are hatched about the latter end of April, or the beginning of May, which may be taken when they are about ten days old. They must be kept very warm, and fed every two hours, from six in the morning till six or seven in the evening. ing.

The cock may be known from the hen by the feathers on his back, which are much browner than those of the hen; and by the white of his wing; to examine which, when the wingfeathers are grown, one of the wings must be stretched out, while the body

of the bird is held fast with the other hand; and then the white must be observed upon three or sour feathers: if it appears bright and clear, and extends to the wings, it is a certain sign of its being a cock; the white in the wing of the hen being much less and fainter.

The linnet may be taught to pipe or whistle, and is easily instructed in the song of any other sine bird; but as its own note is so very sine, that trouble is unnecessary; the natural note of any sine singing-bird being always to be

preferred.

Linnets may be taken with clap-nets in the months of June, July, and August; but slight birds are the most plentiful about the beginning of October. The nets should be placed near the spot where they are accustomed to eat or drink.

### THE GREATER RED-HEADED LINNET, OR REDPOLE.

THIS bird is smaller than the former, and has a bill like that of a chassinch: the head is ash-colour, except that it has a blood-coloured spot on the forehead. The breast is tinged with a sine rose.

rose-colour. The neck is of an ash-colour: the back, scapular feathers, and coverts of the wings are of a bright reddish brown; the sides are yellow, and the middle of the belly white. The tail, like that of the former, is forked, and of a dusky-colour, edged on both sides with white. The head of the semale is ash-colour, spotted with black: the back and scapulars are of a dull brownish red; and the breast and sides of a dirty yellow, streaked with dusky times.

This is a familiar bird, and is as chearful five minutes after it is caught, as a French prisoner is said to be after the same short captivity. It has a pretty chattering kind of song, and is often kept in cages. It should be fed with the same sort of seeds as the common linnet or chassinch. These birds are frequent on our seaecoasts, and, in slight-time, are often taken near London.

# THE LESSER RED-HEADED LINNET.

THIS is the least of the linnets, not exceeding half the fize of the preceding.

ing. These are also distinguished from the last species by the bill being smaller and sharper; by both sexes having the spot on the head; by the legs and feet being dusky; and by their assembling in flocks, which the others do not: Mr. Pennant mentions his having feen the nest of this species on an alderstump near a brook, between two and three feet from the ground. The out-fide confifted of dried stalks of grass. and other plants, mixed with a small quantity of wool; and the lining was composed of hair and feathers: the bird was fitting on four eggs of a pale bluish green, thickly sprinkled near the blunt end with small reddish spots. The bird, continues he, was so tenacious of her nest, as to suffer us to take her off with our hand, and we found, that, after we had released her, she would not forfake it.

# THE TWITE OR MOUNTAIN LINNET.

THIS is rather inferior in fize to the common linnet, and is therefore called by Brisson La petite linette, or little linette, In shape and colour, however, it does

does not materially differ from the common linnet. Its bill is short and yellow, and above and below each eye there is a pale brown spot. The male has a curious red fpot on the rump, which the female has not. This bird takes its name from its note, which has very little music in it : it is a familiar bird, and more easily tamed than the common linnet. This bird is taken in the flight-feason near London, with the linnets, and is there called a twite. It does not breed in England, but comes there in the winter: it will feed on rape and Canary-seed, but gives the preference to the latter. It is common in some parts of France, where it lays eggs resembling those of a linnet, but finaller.

### THE BUNTING.

THIS bird is larger than the common lark, but not very different in colour. It weighs an ounce and an half, and is about seven inches and an half, from the tip of the bill to the end of the claws. The bill of this bird, and the other species of this genus, is singularly con-

## The Yellow-Hammer. 107

constructed; the fides of the upperchap form a sharp-angle, bending inwards towards the lower; and in the roof of the former is a hard knob, sitted for bruising corn or other hard seeds. This bird is somewhat more of a brick-colour than the lark, and its chin, breast, and belly, are of a yellowish white. The throat is marked with oblong black spots, and the tail is about three inches long, and of a dusky red. The legs and claws are of a dusky colour.

## THE YELLOW HAMMER.

THE yellow-hammer is about the fize of a chaffinch, or rather larger. It is fix inches and an half in length, from the tip of the bill to the end of the tail, and weighs about ten drams. The bill is of a dufky hue, and the crown of the head of a pale yellow; spotted with brown in some, and plain in others: the hind-part of the neck is tinged with green; the chin and throat are yellow; and the breaft is marked with an orange red; the belly is yellow, and the lesser coverts of the wings are green; the others are dufky, edged

#### 108 The Yellow-Hammer.

with rust-colour: and the back is of the same colours. The quill-feathers of the wings are dusky, some of which are edged with green, and others with a dirty white. The tail, which is about three inches long, is a little forked at the end; the edges of some of the feathers being green, and some marked with white spots near the tips. The feet are of a light brown, and the claws are black.

It makes a flat nest on the ground on the sides of banks or hedges, and generally under a bush; but sometimes near a river or brook. Its nest is composed of moss, dried roots of grass, weeds, and horse-hair intermixed. It lays six or seven white eggs, veined with a dark purple. The young ones are usually sit to be taken by the beginning of May, but they should remain in the nest till they are ten or twelve days old. This is a very common species, and in the winter frequents farm-yards with other small birds.

The male, in a wild state, sings very prettily; and though it is seldom kept in a cage, yet makes no contemptible figure there; for, exclusive of its song,

his

his fine feathers are some recommenda-

The female is of a duller colour all over the body than the male, and those parts which are of a fine yellow in the latter, are of a dirty green in the former.

#### THE REED-SPARROW.

THIS bird is about the fize of a chaffinch; the length is fix inches and an half, and the breadth ten inches: it has a short black bill, the edges of which are turned a little inwards; fo that the tongue lies buried in a fmall hollow like a funnel. The head, chin, and throat of the male are black; and at each corner of the mouth a white ring commences, which encircles the head. The back, covert feathers of the wings, and the scapular feathers, are black, deeply bordered with red. The belly is white; the two middle feathers of the tail are black, bordered with red, and the three next are wholly black. The exterior web, and part of the interior of the outermost-feather is white. The head of the female is rust-Yor. VII. colour,

colour, fpotted with black, and fire wants the white ring round the neck.

This bird frequents the fides of rivers and marshy-places, and delights in being among reeds, from whence it takes its name. The situation of its nest is remarkably contrived: it is fastened to four reeds, and suspended like a hammock about three feet above the water; the materials of which the nest consists are decayed rushes, fine bents, and hairs. The reed-sparrow lays four eggs of a pale blue, marked with irregular purplish veins, especially on the larger end. It is much admired for its fong, and, like the nightingale, fings in the night. These birds are not, however, very common in cages, but when we are walking in fummer by the fides of a river, they present us, with an agreeable harmony.

### THE GREAT TIT-MOUSE.

THIS bird is also called the ox-eye: it is fix inches in length, nine inches in breadth, and weighs about an ounce. The bill is straight; black, and half an inch in length: the tongue is broad, ending in four filaments; the head and throat

throat are black; the cheeks white; the back and coverts of the wings green. The belly is of a yellowish green, divided in the center, by a line of black, extending to the vent: the rump is of a bluish grey; and the quill-feathers are dusky, tipt with blue and white. The lesser coverts are blue, and the greater are tipt with white. The tail is about two inches and an half long, and of a black colour, except on the outward edges, which are blue.

Though our gardens are sometimes visited by this bird, it chiesly inhabits woods; where it makes its nest in hollow-trees, and lays nine or ten eggs. This, and the whole tribe of tit-mice, feed on insects which they find in the bark of trees; but, in the spring, they do considerable mischief in fruit-gardens, by destroying the tender buds. Like wood-peckers, they are perpetually running up and down the trunks of trees in pursuit of food.

#### THE BLUE TIT-MOUSE.

THIS is a very beautiful bird, but, like the preceding, does great injury to

L 2 fruit-

fruit-trees: it breeds in holes of walls; and lays about twelve or four-teen eggs. It has a fhort dusky bill, and the crown of the head is of a fine blue-colour: the forehead and cheeks are white; and a black line extends from the bill to the eyes. The back is of a yellowish green, and the lower-fide of the body yellow; the wings are blue, marked transversely with a white bar; the tail is blue, and the legs are of a lead colour.

# THE COLE-MOUSE, OR BLACK TIT-MOUSE.

THE length of this bird is five inches, and the breadth seven. It is distinguished from all other tit-mice by its smallness. It has a black head with a white spot on the hind-part; the back is of a greenish ash-colour, and the rump is of a deeper green. The outer-edges of the prime wing-feathers are also green.

THE

#### THE LONG-TAILED TIT-MOUSE.

THIS bird is five inches and a quarter in length, and seven inches in breadth. The bill is black, short, thick, and very convex, differing from all the rest of the tit-mouse kind; the base is beset with small briftles, and the irides are of a hazel colour. The top of the head is white, surrounded with a broad stroke of black, which rifes on each fide of the upper-chap, passes over each eye, and unites at the hind-part of the head; continuing along the middle of the back to the rump. On each fide of this black stroke, the feathers are of a purplish red, as well as those immediately incumbent on the tail. The covert feathers of the wings are black; the fecondary and quill-feathers are dufky. The tail is three inches long, and formed like that of a magpie, confifting of twelve feathers of unequal lengths: the cheeks and throat are white; the breaft and belly are white, tinged with red: the legs and feet are black.

The nest is elegantly built of an oval shape, and about six inches deep,

it is composed of moss, wool, feathers, and down. This bird lays from twelve to fixteen eggs, and the young follow

the parents the whole winter.

There is another bird called the Marsh-Titmouse, from its frequenting wet places, which is about four inches and an half in length, and three inches in breadth. The head is black, the cheeks white, the back greenish, and the feet of a lead colour.

The Bahama Tit-Mouse of Catesby, has a longish black bill, somewhat crooked: the head, back, and wings are brown, a white streak extending from the corner of the bill to the back, part of the head. The breast, and the upper-part of the wings are yellow. It has a long tail, brown above, and cream-coloured below.

The Crested Tit-Mouse is about five inches in length, and eight inches in breadth: the seathers on the top of the head are black, with white edges. It is distinguished from other birds of this kind by the crest, which is about an

inch in height.

# OF THE HUMMING-BIRD, AND ITS VARIETIES.

THOUGH this species is the least, it is certainly the most beautiful of all others. In quadrupeds the smallest animals are noxious, disagreeable, and loathsome; but the smallest of birds are the most beautiful, innocent, and sportive. Of all those that flutter in the garden, or paint the landscape, the humming-bird is not only the most inosfensive, but the most delightful to

behold.

Of this charming creature there are fix or feven varieties, from the magnitude of a wren down to that of an humble-bee. It appears aftonishing to an European that there should be a bird existing so extremely small, and yet completely furnished out with bill, feathers, wings, and intestines, being an exact resemblance in miniature of those of the largest kind: but these are daily seen in infinite numbers, like butterslies in a warm summer's day, sporting in the fields of America, from slower to slower, and extracting their sweets.

The

The smallest of this class is about the fize of an hazel-nut: the feathers on the wings and tail are black: those on the body, and under the wings, are a mixture of green and brown, gloffed with a beautiful red cast: the head is adorned with a creft, which is green at the bottom, and of a bright yellow, or gold-colour at the top. The bill is black, Itraight and flender.

The larger humming-bird is without a crest on it head, and is about half the fize of a common wren: from the throat, half way down the belly, it is covered with changeable crimson-co-loured feathers, which, in different lights, appear in a variety of different colours. The heads of both these birds are fmall, studded with very little spark-

ling black eyes.

As foon as the fun is risen, variety of humming-birds are seen fluttering about the flowers, without ever light-ing upon them. The rapidity of the motion of their wings is so great, that it is impossible to discern their colours, except by their glittering: they are perpetually on the wing, vifiting flower after flower, and extracting its honey. For this purpose, nature has furnished them

them with a forky-tongue that enters the cup of the flower, and procures the nectar upon which alone they sub-fift. They have the name of humming-birds from the sound occasioned by the rapid motion of their wings.

The nest of the humming-bird is also worthy of admiration: it is suspended in the air, at the point of the twice of an orange a cutton or a

twigs of an orange, a citron, or a pomegranate-tree. The male furnishes materials, and the semale is the architect: the nest consists of moss, the fibres of vegetables, and cotton; it is admirably contrived, and about the fize of half an hen's egg. In this the female lays two eggs, about the fize of fmall peas, which are of a pure white, with a few yellowish spots. During the time of incubation, she seldom quits the nest, except a few minutes in the morning and evening, when the dew is upon the flowers and their honey is in perfection. In her absence the male fupplies her place; the eggs being fo yery small that there would be danger in exposing it to the weather for ever fo short a time. The time of incubation continues twelve days, at which time the young ones are excluded, and are about the fize of a blue-bottle-fly. At first they are bare, afterwards they become cloathed with down, which is

at length fucceeded by feathers.

On the continent of America, these birds continue to flutter the year round; for in those warm latitudes, where they have always plenty of flowers, there can be no deficiency of food. But it is otherwise in the islands of the Antilles, where, when the minds of the Antiles, where, when the winter-feason approaches, they retire, and, as some imagine, continue in a torpid state during the severity of that season. At Jamaica, and Surinam, where they have plenty of slowers the whole year, the humming-bird never disappears.

Besides the humming noise produced by their wings, travellers affire us that

by their wings, travellers affure us that these birds have a little interrupted chirrup; and Labat afferts that they have a most pleasing melancholy melody in their voices, though small and proportioned to the organs that produce it

duce it.

This pretty little animal's plumage was formerly used by the Indians in adorning the head-dress and belts; at present, however, they take the bird rather for the purpose of selling it as a curiofity

## Of Birds of the CRANE KIND. 119

curiofity to the Europeans, than that of ornament for themselves: the taste of savage finery is now wearing out

even among the Americans.

The different fizes and varieties of this class of birds are usually diffinguished by the following appellations: the larger Humming-Bird, the Long-Tailed Black-Capped Humming-Bird, the Lesser Humming-Bird, the Little Humming-Bird with a crooked Bill, the Humming-bird with a black Bill, the green Humming-Bird, and the Ash-Coloured Humming-Bird.

### OF BIRDS OF THE CRANE KIND.

NATURE has peopled the woods and the fields with a variety of the most beautiful birds; and, that no part of her extensive territories might remain untenanted, she has also stocked the water with feathered inhabitants. She has as carefully provided for the wants of her animals in this element, as she has for those that inhabit the air: she has defended their feathers with a natural oil to give them security, and united their toes by a webbed membrane to facilitate their motion. But she has formed

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## 120 Of BIRDs of the CRANE KIND.

formed a numerous tribe of birds that feem to partake of a middle nature, between the classes of land-birds that avoid the water, and of water-fowls that are peculiarly adapted for swimming and living in it: these have divided toes, and, on that account, feem fitted to live upon land; but they are fur- \* nished with appetites that attach them chiefly to the waters: they provide all their fustenance from watery places, but they are unqualified to feek it in those depths where it is usually found in the greatest plenty. They live indeed among the waters, but they are incapable of swimming in them; they have in general long legs, fitted for wading in shallow waters, or long bills proper for groping in them in pur-

fuit of their prey.

Birds of this kind, habituated to marshy places, may be known either by the length of their legs, or the scaly surface of them. Birds of this kind too are generally bare of seathers half way up the thigh, and all of them above the knee at least; so that there is a surprizing difference between the leg of a crane, which is naked almost up

## Of BIRDS of the CRANE KIND. 121

to the body, and the falcon, which is

cloathed almost to the toes.

In most birds of this class the bill is also very distinguishable. It is, in general, longer than that of other birds, and at the point is possessed of extreme sensibility, and furnished with enerves for the better seeling their food at the bottom of marshes, where it cannot be seen. Some of these birds are furnished with every convenience, having long legs for wading, long necks for stooping, and long bills for searching. It is generally observed if the legs of a bird are long, the neck is also long in proportion; there would otherwise be a defect in its conformation; as it would be listed upon stilts above its food, without being furnished with an instrument to reach it.

If we take a comparative view of this class of birds, they seem inferior to those of every other tribe. Their nests are more simple than those of the sparrow, and their methods of obtaining food less ingenious than those of the falcon: in cunning they are exceeded by the pie, and they want the secundity of the poultry tribe. None of

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## 122 Of BIRDS of the CRANE KIND.

this kind therefore are taken under the protection of man; they are neither caged like the nightingale, nor kept tame like the turkey; but lead a life of precarious liberty in fens and marshes, or on the borders of the seas or lakes. They all live upon fish or insects, one or two only excepted: and even those which are called mud-suckers, such as the snipe and wood-cock, perhaps grope the bottom of marshy places only for such insects as are deposited there by their kind.

Such of this class of birds as feed upon infects are fit to be eaten; but those which live entirely upon fish, acquire in their flesh the rancidity of their diet, and are, in general, improper for our tables. To sailors on a long voyage, indeed, every thing that has life seems good to be eaten: their accounts, therefore, of the slesh of these birds are not to be depended upon; and when they mention the heron or the stork of other countries as luxurious food, we should always attend to the state of their appetites.

THE

#### THE CRANE.

VARIOUS are the accounts given of this bird's fize and dimensions. According to Willoughby and Pennant, the crane is from five to fix feet long, from the tip to the tail. Other accounts say, it is above five feet high; and others that it is about the height of a man. Brisson, however, seems to give this bird its real dimensions, when he describes it as something less than the brown stork, about three feet high, and about four from the tip to the tail. Still, however, the numerous testimonies of its superior size are not entirely to be rejected; and, perhaps, that from which Brisson took his dimensions, was one of the smallest of the kind.

According to Brisson, the crane is exactly three feet four inches from the tip to the tail, and four feet from the head to the toe. It is a tall, stender hird, with a long neck and long legs. The top of the head is covered with black brissles, and the back of it is bald and red, which is sufficient to distinguish this bird from the stork, to which it is nearly allied in size and M 2 figure.

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figure. The plumage is ash-coloured; and two large tusts of feathers spring from the pinion of each wing. These resemble hair, and are finely curled at the ends, which the bird has a power of erecting and depressing at pleasure. Gesner informs us, that in his time, these feathers were often set in gold,

and worn as ornaments in caps.

The crane is a bird with which all the ancient writers are familiar; and, in describing it, they have not failed to mix imagination with history. From the policy of the cranes, they say, we are to look for an idea of the most perfect republic amongst ourselves; from their tenderness to their decrepid parents, we are to learn lessons of filial piety; but particularly from their conduct in fighting with the pigmies of Ethiopia, we are to receive our maxims in the art of war. In early times, the history of nature fell to the lot of poets only, and certainly none could so well describe it; but it is a part of their province to embellish also; and when this agreeable science was claimed by a more sober class of people, they were obliged to take the accounts of things

as they found them; thus fable randown, blended with truth, to posterity.

There is doubtless some foundation of truth in these relations; but much more has been added by fancy. Cranes are certainly very focial birds, and they are feldom feen alone. Their usual method of flying or fitting, is in flocks of fifty or fixty together; and while force of them feed, others flund like centinels upon duty. The fable of their supporting their aged parents, may have arisen from their strict connubial affection; and as for their fighting with the pigmics, it may not be improbable but that they have boldly withflood the invations of monkeys coming to ma their nests.

The crane is a wandering, fociable bird, that subsists chiefly upon vegetables; and is known in every country of Europe, except our own. There is no part of the world, says Belonius, where the fields are cultivated, that the crane does not come in with the husbandman for a share in the harvest. As birds of passage, they are seen to depart and return regularly at those seasons when their provision invites or repels them. They usually quit Europe about the M 3 latter

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latter end of autumn, and return in the spring. In the inland parts of the continent, they are seen crossing the country, in large slocks, making from the northern regions towards the south. In these migrations, however, they are not so resolutely bent upon expedition, but that if a field of corn presents it-self in their way, they will stop for a time to regale upon it: on such occasions they do incredible damage, chiefly in the night; and when the husbandman rises in the morning he beholds his fields laid entirely waste by an enemy, whose swiftness his vengeance cannot overtake.

They were formerly known in this island, and held in great estimation, for the delicacy of their sless: there was even a penalty upon such as destroyed their eggs; but, at present, this country is too populous and too well cultivated: though our fields may offer them a greater plenty, yet it is so guarded, that these birds find the venture greater than the enjoyment. We are indeed much better off by their absence than their company; for whatever their sless might once have been, when, as Plutarch tells us, cranes were blinded

blinded and kept in coops, to be fattened for the tables of the great in Rome; or, as they were brought up, stuffed with mint and rue, to the tables of our nobles at home; they are now considered all over Europe as wretched

eating. The crane's favourite abode is the cold Arctic region. They come down into the more fouthern parts of Europe, rather as vifitants than inhabitants: yet it is not well known how they portion out their time to the different parts of the world. The migrations of the field-fare, or thrush, are obvious, and well known; they go northward or southward, in one simple track; when their food fails them here, they have but one region to go to. But the crane changes place like a wanderer. Gesner assure that the cranes usually began to quit Germany from about the 11th of September to the 17th of October; from thence they were seen slying southward by thousands; and Redi tells us, they arrive in Tuscany a short time after. There they tear up the fields, newly sown, for the grain the fields, newly fown, for the grain just committed to the ground, and do incredible mischief. In the severity of winter, winter, it is probable they go fouth, ward, still nearer the line. They again appear in the fields of Pifa, regularly about the twentieth of February, to

anticipate the spring.

It is amazing to conceive the heights to which they ascend, when they take these journeys. Their note is remarkably loud, and is often heard in the clouds, when the bird itself is invisible. As it is light in proportion to its size, and spreads a large expanse of wing, it is capable of floating at the greatest height, where the air is lightest; and thus secures its safety, by being entirely out of the reach of man.

Though unseen themselves in these aerial journies, they have a distinct vision of every object below them. They govern and direct their flight by their cries; and exhort each other to proceed, or to descend, when opportunities for depredation present themselves. Their voice is the loudest of all the feathered tribe; and its peculiar clangor arises from the very extraordinary length and contortion of the wind-pipe. In quadrupeds, the wind-pipe is short, and the glottis, or cartilages

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lages that form the voice, are at that end next the mouth: in water-fowl the wind-pipe is longer, but the cartilages that form the voice are at the other end, which lies down in their belly. They have therefore much louder voices, in proportion to their fize, than any other animals; for the note, when formed below, is reverberated through all the rings of the wind-pipe, till it reaches the air.

As these birds rise but heavily, they are extremely shy, and seldom suffer mankind to approach them. Their depredations are usually made in the darkest nights, when they sometimes wisht a field of corn, and trample it down as if a thousand oxen had crossed over it. If, upon these occasions, they are invaded on any fide, the bird that first perceives the danger is sure to found the alarm, and all are speedily upon the wing. Sometimes they choose an extensive solitary marsh, where they range themselves all day; and not having that grain which is most agreeable to them, they wade for insects and other food, which they can procure without danger.

But

But though corn is the favourite food of this bird, there is hardly any thing that comes amiss to it. It is peaceful, both in its own society, and with respect to those of the forest. Though so large in appearance, it is sometimes pursued and disabled by a little falcon. It is an animal easily tamed, and, according to Albertus Magnus, has a particular affection for man. The female, which is easily distinguished from the male, by not being bald behind, lays no more than two eggs at a time, which are like those of a goose in fize, but of a bluish colour. As soon as the young ones are capable of flying, the parents forsake them to shift for themselves; after first leading them to the places where their food is most easily found. As they grow old, their plumage becomes darker. It is not certainly known how long a crane will live, but as a proof of its longer vity, Aldrovandus assures us, that a friend of his kept one tame for above forty years. The common people of every country bear the crane a compassionate regard to this day; the angeing field continue to operate. In some countries countries

countries it is confidered as an heinous offence to kill a crane, and though the laws may not punish the offender, the people do not fail to resent the injury.

### THE BALEARIC CRANE.

THIS is nearly of the same shape and size as the ordinary crane, with a long neck and long legs like others of the kind; but the bill is shorter, and the feathers are of a dark greenish grey: the most striking parts of this bird's figure are the head and throat. On the head appears a thick round creft, made of briftles, fpreading on every fide, and refembling rays standing out in different directions. The longest of these rays are about three inches and an half; and they are all topped with a kind of black taffels, which render them extremely beautiwhich render them extremely beautiful. The fides of the head are bare, whitish, and edged with red; and a kind of bag or wattle hangs beneath the throat, resembling that of a cock, but is not divided into two. The eyes of this bird are large and staring; the pupils are black, with a gold-coloured

loured iris; and, upon the whole, it

has a very fingular appearance.

This bird is a native of the coast of Africa, and the Cape de Verd islands, and feeds upon grass and feeds. As it runs it extends its wings, and moves very fwiftly; otherwise its usual mo-tion is very flow. In their domestic state they mingle with other poultry, and fuffer themselves to be approached by every spectator. When they are disposed to go to rest, they generally make choice of some high wall, on which they perch in the manner of a peacock.

#### THE NUMIDIAN CRANE.

THIS is vulgarly called by our failors the buffoon-bird, and by the French demoiselle, or lady; because it is supposed to imitate the gestures and dances of the Bohemian ladies. It does not follow people for what it can get, as animals in general do, but in order to be taken notice of; and when they perceive that they are observed, they immediately begin dancing. The French, who are skilled in the arts of elegant gesticulation, consider all its motions

motions as lady-like, and graceful. Our English sailors, however, who are less competent judges of the dancing art, think this bird cuts but a very ridiculous sigure while it is thus in motion. It stoops, then rises, raises one wing, and then another. After that it turns round, sails forward, and then back again. Some are of opinion that these contortions are but the aukward expression of the poor animal's fears, and not of its pleasures.

It has appendages at the head which are three inches and an half in length, composed of white feathers, consisting of fine long fibres. The rest of the plumage is of a leaden grey colour, except some large feathers on the wings, which are darker, and a few feathers about the head and neck. Some have plumes of feathers erected like a crest on the top of the head. From the corner of each eye a streak of white feathers passes under the appendages, which form the great feathered ears. The fore-part of the neck is adorned with black feathers, composed of very fine foft and long fibres, hanging down upon the stomach, and give the bird a very graceful appearance.

N

The

The length of this bird, from the tip of the bill to the end of the claws, is three feet and an half. The neck is fourteen inches; and it is ten inches from the thigh-bone to the extremity of the great-toe. The fore-fide of the legs are covered with large scales: the sole of the foot has the appearance of shagteen-leather, and the claws are black. It is an inhabitant of Numidia.

#### THE HOOPING CRANE. .

THE length of this bird, from the tip of the bill to the end of the claws, is five feet seven inches; the bone that extends from the knee to the foot is eleven inches; and the thigh is bare five inches above the knee: the middle toe is five inches long without the claw; and the bill, which is toothed at the point, is fix inches long. The notirils are placed in the channels in each fide, at about a third part of the length from the head. The chaps are of a yellowish brown at the ends, and a little dusky in the middle. The top of the head is covered with a reddish skin; behind which there is a triangular spot, with

one of the points backwards: the fides of the head, throat, neck, body, and tail, are white; but the nine outermost quills of the wings are black; and the tenth black and white; the rest being entirely white. The outer and middle toes are united by a web as far as the first joint, and the legs and feet are covered with black scales. This is thought to be a bird of passage: it is however seen in the spring about the mouths of rivers in Florida.

## THE JABIRU.

THIS is one of the crane kind, and a native of Brasil: the bill is black, and eleven inches long; and the body exceeds the fize of the swan. It is covered with white feathers, the head and neck excepted, which are quite naked.

## THE JABIRU GUACU,

THIS is also a native of Brasil. It has a red bill, which is thirteen inches long; though its body is not above the fize of a common flork. This also is covered with white feathers, except

N 2 on

on the head and neck, which are entirely bare. The lower-chap of this

bird is broad and bends upwards.

There is another Brasilian bird of this kind, called the Anhima. It is a water-fowl of the rapacious kind, and larger than a fwan. The bill is black, and does not exceed two inches in length; but the most distinguishing mark is a horn growing from the fore-head as long as the bill, and bending forward like that of the fabulous unicorn of the ancients. This horn is about the thickness of a crow-quill, perfectly round and regular, and of an ivory colour. This formidable bird feems to be armed at all points; for two streight 'triangular spurs, about as thick as a man's little finger, spring from the fore-part of each wing: the claws are also long and sharp. These birds are never found alone, but always in pairs. The cock and hen wander together, and so great is their fidelity, that, when one dies, it is said the other never departs from the body, but refuses sustenance, and dies at the side of its companion.

THE



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## THE STORK.

AT a transient view the stork might be confounded with the crane. It is of the same fize, and has the same formation as to the bill, neck, legs, and body, but it is rather more corpulent. The colour of the crane is ash and black; that of the stork is white and brown; the nails of the toes of the stork are also very peculiar; not being clawed like those of other birds, but state like the nails of a man. The crane has a loud piercing voice; the stork is silent, and produces no other noise than the clacking of its under chap against the upper.

It has often been remarked, that the focial affections are found to be stronger in their descent than their ascent; that the love of parents to their children, for instance, is commonly more ardent than that of children for their parents; though, from the state of things, and from the obligations which children owe their parents, one might reasonably expect it to be otherwise. However, there is a visible good design in this wise destination; we see in it, as in every object.

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object we feriously contemplate, the determination of high wisdom. The offspring both of the human and the animal race, come into the world feeble and helpless; and if the parental affection were not exceedingly forcible, they must perish in their weak and forlorn condition; and the creation would thus speedily be brought to an end. There is not the same reason for the return of affection in the offspring, and therefore we rarely find it in the animal world; soon as the young is able to provide for itself, a mutual forgetfulness generally ensues, and the parent grows as regardless of its offspring as the offspring of its parent.

There is however one creature, which contradicts this almost general rule in the animal world; and which is as remarkable for its love to its parents, as other creatures are for their love to their young: this is the ftork, whose very name in the Hebrew language [chefidah] fignifies mercy or piety, and whose name in the English seems to be taken, if not directly, yet secondarily through the Saxon, from the Greek word storge, which is often used in our language for natural affection.

The

The stork is a bird of passage, and is spoken of as such in scripture: See Jerem. viii. 7. "The stork knoweth her appointed time, &c." Some say, that when they go away, the stork which comes last to the place of rendezyous, is killed on the spot. They away in the night to the southern countries. Thompson, in his Seasons, gives the following sine description of the passage of the storks:

Where the Rhine loses his majestic force
In Belgian plains, won from the raging deep,
By diligence amazing, and the strong
Unconquerable hand of liberty,
The stork-assembly meets: for many a day
Consulting deep and various, ere they take
Their ardwous voyage thro' the liquid sky.
And now their rout design'd, their leaders chose,
Their tribes adjusted, clean'd their vigorous wings,
And many a circle, many a short essay
Wheel'd round and round, in congregation fall
The figur'd slight ascends; and riding high
Th' aerial billows, mixes with the clouds.

AUTUMN, 1. 859.

The ftork has a very long beak, and long red legs. It feeds upon ferpents, frogs, and infection as it feeks for these in watery places, nature has provided it with long legs; and as it flies away, as well as the crane and heron, to its nest

nest with its prey; therefore the bill is strong and jagged, the sharp hooks of which enable it to detain its prey, which it might otherwise be difficult to hold. The abbe La Pluche says, "a friend of mine, who has an effate at Abeville, bounded by a river plenting fully stored with eels, saw a heron one day carry off one of the largest of those creatures into his hernery, in spite of the efforts and undulations of the cel to oppose his flight." Thus we see the wise provider has not given those creatures such bills for naught; the storks dig with theirs into the earth for ferpents and adders, which, however large, they convey to their young, to whom the poison of those animals is perfectly inoffentive. The plumage of the stork would be quite white, if it was not that the extremity of its wings are black, and also some small part of its head and thighs. It lays but four eggs, and fits for the space of thirty days.

But that which renders it the most remarkable is, its leve to its parents, whom it never for lakes, but tenderly feeds and defends, even to death. The very learned and judicious Bochart \*,

<sup>\*</sup> See his H.crox, b. ii. c. xxix, p. 327.

has collected a variety of passages from the ancients, wherein they testify this curious particular; that the stork is eminent for its performance of what St. Paul enjoins, "Children's requitaing their parents," I Tim. v. 4. This caused one of the seven wise men to reply to Cræsus, when he asked, "which of the animals was the most happy? The stork; because it performs what is just and right by nature, without any compelling law." And hence one of our poets speaks thus finely of the stork:

The flork's the emblem of true piety:
Because when age has seiz'd, and made his dam
Unfit for flight, the grateful young one takes
His mother on his back, provides her food;
Repaying thus her tender care of him
Ete he was fit to fly, by bearing her."

BEAUMONT.

The Dutch are very folicitous for the preservation of the stork in every part of their republic. This bird seems to have taken refuge among their towns; and builds on the tops of their houses without any molestation. There it is seen resting familiarly in their streets, and protected as well by the laws as by the

the affections of the people. They are even of opinion that it will not live but in a republic.

but in a republic.

How amiable is filial piety! Obferre, he ye children, and imitate; and
fet not the example of a bird upbraid
and condemn you; but on the contrary, flimulate your fouls to the difcharge of this most pleasing duty;
"Could you be sensible of the anxious thoughts, the sleepless nights, the
watchful days your parents have passed
for you: of the bleeding sears, the
affectionate hopes, and all the unutterable concern, which throbs in their bosoms for you: a sympathetic gratitude ble concern, which throbs in their bofoms for you: a fympathetic gratitude
world fill your fouls, and you would
think it your highest happiness, as
it really is your indispensible duty,
by every possible means to make them
fome amends; and to footh the decline of their days with all the lenient
assumptions of filial piety and love. And
oh! how exquisitely comfortable, how
divinely pleasing to rock the cradle of
declining age, and to return the unspeakable obligations of parental care!

Parents who take that care, who are
diligent to improve the minds of their
children in true religion and virtue,
will

will but rarely be disappointed of that return. Indeed, love alone, mere natural affection, may not be depended on, being regarded as a thing of course which a child is not much concerned toreturn; and which loses much of its force, when the child meets with other objects to divert its affections. But a mind trained up in wisdom and virtue can never be ungrateful to its best benefactors: the early impressions of a wellmanaged authority are never wholly effaced. And confidering the advantages which nature gives parents, it is easy to establish a lasting dominion ever the supple spirits, if they are not intoxicated into a shameful neglect of their children and themselves. For children are easily taught to stand in awe of their parents, to regard their persons as sacred, and their commands indiffutable."

best love of their children! Happy children, who love and obey their chirdrens; they shall be blest of their God: they shall not fail of their re-

ward!

THE

## THE HERON.

THOUGH the crane, the flork, and the heron bear a flrong affinity to each other, the heron may be diffinguished from them, not only by its fize, which is much lefs, but its bill, which in proportion is much longer; but particularly by the middle claw on each foot, which is toothed like a faw for the better feizing and fecuring its flippery prey. There is also an anatomical diffinction, in which herons differ from all other birds; they having but one coccum, though all other birds have two.

Brison has enumerated no less than forty-seven sorts of this tribe, all differing in figure, size, and plumage; but they all seem possessed of the same manners, and have one general character of cowardice, rapacity and indolence, yet insatiable hunger. Other birds grow sat by an abundant supply of food; but these, though excessively voracious and destructive, are ever

found to be lean and hungry.

In proportion to its bulk, the common heron is remarkably light, and feldom exceeds three pounds and an half



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half in weight; though its length is three fect, and its breadth upwards of five feet. Its body is very small, and its skin remarkably thin: the bill is five inches long, from the point to the base: the claws are sharp and long; and the middlemost is toothed like a faw. But, notwithstanding it is thus formidably armed, it is so cowardly as to fly at the approach of a sparrowhawk. It must be capable of enduring a long abstinence, as its food, which is fish and frogs, cannot be readily procured at all times. It however commits great devastation in our ponds; for, though nature has not furnished it with webs to swim, she has given it very long legs to wade after its prey: the smaller fry are his chief subsistence, and as these are pursued by their larger fellows of the deep, they are obliged to take refuge in shallow waters, where they find the heron a still more formidable enemy.

The heron wades as far as he can go into the water, where he impatiently waits the approach of his prey; which he darts upon with unerring aim, as foon as it appears in fight. In this manner he is faid to destroy more in Vol. VII. Q one

one week, than an otter in three months. And Mr. Willoughby affures us it fometimes seizes fish of a tolerable fize: 66 I have seen an heron, says he, that had been shot, that had seventeen carps in his belly at once, which he will digest in fix or seven hours, and then to fishing again. I have seen a carp taken out of a heron's belly, nine inches and an half long. Several gentlemen who kept tame herons, to try what quantity one of them would eat in a day, have put several smaller roach and dace in a tub, and they have found him eat fifty in a day, one day with another. In this manner a fingle heron will destroy fifteen thousand carp in a fingle half year."

Though the heron liveschiefly among pools and marshes, it builds on the tops of the highest trees, and sometimes on cliffs hanging over the sea. The nest is composed of sticks, lined with wool; and the female lays four large eggs of a pale green colour. Such, however, is the indolence of the nature of this bird, that it never takes the trouble of building a nest for itself, if it can procure one deserted by the owl or crow. Indeed it usually enlarges it, and lines

Tol.III.

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it within fide; and, if the original possession happens to renew his claim, the usurper treats him very roughly, and drives him away for his impertinence.

The heron was formerly much efreemed as food, and made a favourite dish at the table of the great, but now, it is thought detestable eating. It is said to be very long lived; and Mr. Keysler's account says sixty years is no very uncommon age \*.

#### THE CRESTED HERON.

THE bill of this elegant species is about fix inches long, very strong and sharp-pointed; the colour dusky above, and yellow beneath: the space round the eyes, between them and the bill, are covered with a bare greenish skin: the forehead and crown of the head are white; the hind-part being adorned with a beautiful pendant crest of black feathers. The hind-part of the neck, and the coverts of the wings are grey; the back is clad with down, and covered with the scapular feathers: the forepart of the neck is white, elegantly spotted, with a double row of black.

<sup>\*</sup> Keytler's Fraveis, 1. 70.

The feathers, which are long and nartow, fall loose over the breast; the scapulars are grey, streaked with white. The ridge of the wing, and the breast, belly, and thighs are white; the latter dashed with yellow. The tail, which consists of twelve feathers, is ash-co-loured; and the legs are of a dirty green.

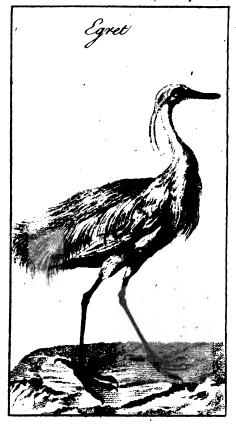
# THE GREAT WHITE HERON, OR EGRET.

THE length of this bird, from the tip of the bill to the end of the claws, is four feet and an half; and to the end of the tail three feet and a quarter: the breadth, with extended wings, is five feet and an half; and the weight about two pounds and an half. This bird is entirely white, by which it may be diffinguished from the common heron; it may also be diffinguished by its fize, which is smaller; by the length of its tail; and by its having no crest. This heron is not often seen in England.

There is a bird of this kind, called the Lesser White Heron, which only differs from the preceding in fize, and

in having a creft.

The little white heron of Catesby, has a crooked red bill, with a yellow



iris of the eyes: the body is white, and the feet are green.

# THE YELLOW AND GREEN HERON OF MARSEILLES.

THE bill of this bird is black above, yellow below, and about three inches in length. The irides are white, as well as that part of the neck next the chin; but the rest of the neck, the top of the head, the breast and belly, are variegated with brown lines. The back is black; the wings are yellowish, spotted with black; and the tail is short; the feathers of which are short, and greatly resemble hair. The thighs are ash-co-lour, the feet black, and the claws yellow.

### THE BITTERN.

THE bittern is less than the heron, and has a weaker bill, which is not above four inches in length: but it principally differs from the heron in its colour, which is usually of a palish yellow, spotted and barred with black. It has two kinds of notes; the one croaking, when it is disturbed; the other bellowing, which it commences O 3

in the fpring, and ends in autumn. The latter is indeed like the roaring of a bull, but hollower and louder, and is heard at the distance of a mile. From the loudness and solemnity of this note, many have imagined that the bird made use of external instruments to produce it, and that fo small a body could never eject such a quantity of note. The common people are of opinion that it thrusts its bill into a reed; which, like a pipe, affists in swelling the note above its natural pitch. Thompson the poet, and many others, suppose the bittern puts its head under water, and then violently blowing, produces that noise. The fact is, its wind-pipe is fitted to produce the found for which it is remarkable; the lowerpart of it dividing into the lungs, is supplied with a thin loose membrane, which can be filled with a large body of air, and exploded at pleasure. It is certain that the bittern is frequently heard where there are neither reeds nor waters to affift its fonorous invitations.

This is a very retired bird, concealing itself in the midst of reeds and rushes in marshy places. Though it is of the heron kind, it is neither so defiructive

ftructive nor so voracious; and though it so nearly resembles the heron in figure, it differs from it greatly in its manners and its appetites. The food of the bittern is chiefly frogs: it builds its nest with the leaves of water-plants; and lays fix or feven eggs of an ashgreen colour. The heron feeds its young for several days; the bittern conducts its little ones to their food in about three days. The flesh of the bittern has much the same flavour as that of the hare, and is free from the fishyness of that of the heron: it is therefore eagerly fought after by the fowler, and as it is with difficulty provoked to flight, and has a dull and flagging pace when on the wing, it does not often escape him. Towards the end of autumn, however, it seems to have shook off its wonted indolence, and is seen rising in a spiral ascent till it is quite lost from the view, making at the same time a very singular noise. Thus it often happens that the same animal assumes different desires at different times; and tho' the bittern has acquired the name of the star-reachingbird among the Latins, the Greeks have thought it merited the epithet of lazy. This This bird is called the mire-drum in the north of England.

# THE NORTH-AMERICAN BITTERN.

THIS is smaller than the English bittern; the wing, when closed, not exceeding twelve inches in length. It resembles ours with regard to the colour and sigure, but may be distinguished from it by carefully comparing them together.

### THE SMALL BITTERN.

THIS bird is fourteen inches in length, and twenty in breadth. The bill is two inches long, and sharp at the point; the upper-chap being black, and the lower yellow. The base of the bill is surrounded with a yellow naked membrane, extending as far as the nostrils. The tail is not above an inch long; and the feathers on the top of the head are brown, rising a little in the manner of a tust. The upper-part of the neck, the back, wings, and tail are also brown, a few whitish and tawny spots excepted. The lower-part of the neck, the breast, and belly are of a light brown,





brown, mixed with white and flesh-

# THE LITTLE BITTERN OF BRASIL.

THIS bird is smaller than the common pigeon, but the length of its neck is about seven inches. The skin at the base of the bill is yellowish. upper part of the head is of the colour of steel, interspersed with palish brown feathers. The neck, breaft, and belly are whitish; but the back is a mixture of black and brown. The long feathers of the wings are greenish, with a white spot at the extremity of each. The other parts are beautifully variegated with black, brown, and ashcolour; and the feet are of a bloffomcolour. The bill is long, ftraight, and sharp, and black at the point; the iris of the eyes is of a gold-colour, and the tail does not extend beyond the wings.

#### THE SPOON-BILL, OR SHOVEL-LER.

IF there had not been philosophers, who have contended for the fortuitous pro-

production of things, one would have conceived it impossible for any human being to entertain so strange a notion. The most superficial survey of nature so clearly indicates wisdom and design, that it seems to shock every principle of common sense to deny that in the works of the Deity, which we so readily confess in the works of men. But if order and harmony sufficiently prove design, variety and beauty as evidently prove wisdom; and the latter are as visible in the works of God as the former: we have instances enough before us; but among the rest let us at present fix our attention on the spoonbill, as singular and curious a bird as any in nature.

When it stands erect, the spoon-bill is about a yard in height; the body is small, but it is the length of the legs and neck which give it this stature. The beak is about eight inches in length. It is all the way broad and flat; but as the beaks of all other birds are largest at the head, and smallest at the point, this, on the contrary, is largest there; it swells out into a broad and rounded end, like the bowl of a spoon, except that it is not hollow; and whether shut

or open, makes a very fingular appearance.

The bird is all over as white as fnow, and though it has no fort of variety about it, yet appears wonderfully pretty by its cleanliness. It is frequent in many parts of Europe, and is always feen about waters. The structure of the bill appears strange at first fight; but, like all other things, in the contrivance of the God of nature, when we come to enquire into its use, it is easy to know why it had this form. The food of the creature is principally the frog, a nimble and cunning animal, which will evade the stroke of a sharp beak darted down at it, or will slip away sometimes from the heron, even when seized; the spoon-bill, therefore, opening its beak wide, places it near the ground where these reptiles are frequent, and when any come in its way, closes the beak upon them: the beak is not only broad to hold them in a large grasp at once, but it is notched and toothed all the way round; fo that to escape is impracticable. With this the bird crushes the frog till it is half dead, and then swallows it.

- Thus we see nature does nothing in vain; and he who can conceive that fuch a fingular instance of defign is the effect of blind chance, and not the production of an All-wife Defigner, must have either a very bad head, or a worse heart; and well deserves to fit as a scholar at the feet of that Frenchman \*, who, to discredit the scriptureaccount of the origin of man, has recourse to the vainest and most absurd of all systems; and would have us believe, that men of different colours and tempers, fprung, like mushrooms, out of different foils, on this globe! Amazing absurdity! But to what lengths will not pride and the love of paradox, lead men!—How much happier will it be; how much wifer and better men fhall we prove ourselves, by adoring the Almighty and the All-wife, and looking up to him, through the glass of the creatures, with humility, confidence, joy, and love?

The spoon-bill of America is of a

The spoon-bill of America is of a beautiful rose-colour, or a delightful crimson. Beauty of plumage seems to

<sup>.</sup> M. Voltaire.



be the prerogative of all the birds of that continent.

A bird fooddly fashioned as the spoonbill, might be expected to possess some very peculiar appetites; but it seems to lead a life entirely resembling all those of the crane kind. In Europe it breeds in high-trees, in company with the heron, and in a nest formed of the same materials: it lays four or sive eggs, which are white, pawdered with a few pale spots.

#### THE FLAMINGO.

A curious enquirer into nature could no fooner cast his eyes upon this extraordinary bird, than he would be satisfied, that some peculiar ends were to be answered, by its uncommon length of legs and neck; the largest, we believe, of any of the bird-kind, Andcertainly nothing can be a stronger proof of design and wisdom, in the Creator of all things, than the correspondence observable in creatures between their wants, and the provision for those wants. The slamingo is a sufficient example: it is frequent, in the warmer climates, and most commonly

found about the shallow shores of the fea, and the mouths of rivers. When it is feen in the water, which is generally the case, the body only is on the surface, and it appears swimming, tho really standing. The head also, is almost constantly under water, in search of food: at these times all that is feen, is the body of a bird, as large as a wild goose, or a little more; but with what aftonishment does the stranger fee it come out of the water! The head is first raised erect, and the surprising length of the neck, is like that of the offrich, only more extraordinary: the body, as it comes on shore, is raised as much above the ground, as the head above the body, and there stalks forth a bird of a wonderful height; and in beauty furpassing almost every other. The wings nearly cover the body, and the tail is nothing: what part of the body remains uncovered is fnow white; the colour of the wings is of a scarlet, so bright, that the eye is dazzled to look long upon it; and the long feathers are of the deepest black: the neck is of the same snow-white with the body, and the legs are of the same scarlet with the wings: the beak is blue, except

cept at the tip, where it is black. It is not long, straight, and sharp, as in the heron kind, but vastly strong, and of a shape so singular, that it appears broken. The legs and thighs, which are not much thicker than a man's finger, are about two feet eight inches high; and its neck near three feet long. toes of the bird are connected together, by a membrane like those of the duckkind; fo that it can swim; but the legs are long, and it never makes this wie of them, in the common course of its feeding: the only purpose to which these webs serve, is the preservation of its life on fingular occasions. The tides are sudden in some parts of America, where the bird is common; and while it is rooting under some rough stone for a shell-fish, it becomes out of its depth. In this case the least gust of air might blow it to sea, and it must perish, for it does not very easily rise from the water, when out of its depth. The webbed feet now are useful; it swims till it can reach the bottom, and as foon as a small part of its legs are out of the water, it takes wing.

Thus an indulgent providence hath taken care, as well for its particular P 2 fafety,

fafety, as its general support; and he must be blind, who does not see the provision, which the Creator hath made for this bied's supply of its wants, as well as those of others of the same kind. As they are to receive their nourishment from animals or plants, which are found in the water, and yet have no power to swim; the length of their legs and neck, fufficiently answers all their demands. "Those who admire," fays a learned writer, "the wonderful means, by which the God of nature has contrived, that those animals, which he has endued with a lesser principle than reason, should provide themselves with food, and secure their existence. during a life, in which they are liable to innumerable accidents, would add a great deal to the measure of their surprise, did they comprehend the variety of those means!" How manifold are his works!

"The flesh of an old flamingo," says Dampier, "is black and hard, though well tasted; but that of a young one is much better. But, of all other delicacies, the flamingo's tongue is the most celebrated. A dish of these tongues,"

tongues," continues he, " is a feast

for an emperor."

These birds always go in flocks, and are sometimes seen, at the dawn of day, flying down in great numbers from the mountains; and conducting each other with a trumpet cry, founding like the word tococo, from whence the favages of Canada have given them the name. Their time of breeding is regulated by the climate in which they reside: in North-America they breed in our summer; on the other fide of the line they take the most favourable season of the year. They build in extensive unfrequented marshes; and their nests are not less curious than the animals which build them: they are raised about a foot and an half from the furface of the pool, and are formed of mud scraped up together, and hardened by the fun, or the heat of the bird's body: they resemble one of those pots which we fee placed on chimnies, and are hollowed out in the shape of the bird, and have no lining but the well cemented mud that forms the fides of the building. The female lays only two eggs; and as her legs are immoderate-ly long, she straddles on the nest, while P 3 her

her legs hang down, one on each fide, into the water.

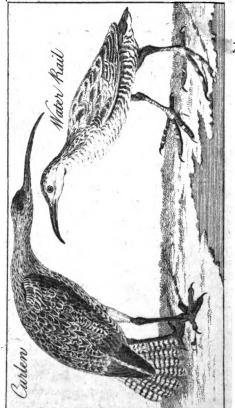
#### THE AVOSETTA, OR SCOOPER.

THE avosetta may be distinguished from all other birds by the fingular form of its bill, which turns up like a hook, in an opposite direction to that of the hawk or parrot: this extraordinary bill is about three inches and an half long, slender, compressed very thin, flexible, and of a substance like whalebone. The tongue is short: the head is black, as well as half the hindpart of the neck; all the under fide of the body is of a pure white; the back, the coverts on the ridge of the wings, and some of the lesser quill-seathers, are of the same colour; the other coverts. and the exterior fides and ends of the greater quill-feathers are black: the tail confists of twelve white feathers ¿ the legs, which are very long, are of a fine blue-colour, and naked higherthan the knees; the webs are dulky, and deeply indented.

It feeds on worms and infects, which it scoops out of the sand with its bill. It lays two eggs about the fize of those of

Avosetta

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of the pigeon, which are white tinged with green, and spotted with black. These birds are often seen in winter on the eastern shores of this kingdom: in Gloucestershire, at the Severn's mouth; and sometimes on the lakes of Shropshire. It has a chirping pert note, and frequently wades in the waters.

#### THE CURLEW.

THE weight of the curlew is about twenty-seven ounces; the length, from the top of the bill to the end of the claws, twenty-nine inches; and the breadth, when the wings are extended, three feet four inches. The bill of this bird, which is near fix inches long, is narrow, a little crooked, and of a dark brown-colour. The legs are long, bare, and of a dusky blue, having a thick membrane which reaches to the first joint. This bird is of a greyish colour, and its flesh is very rank and fifty, notwithstanding an old English proverb in its favour. In the winter time, these birds frequent our seacoasts in large flocks, walking on the open fands; feeding on crabs and other marine infects. In the fummer they retire retire to the mountainous part of the country, where they pair and breed. Their legs are of a pale olive-colour, marked with irregular brown spots.

marked with irregular brown fpots.

The leffer curlew, called also the wimbrel, greatly resembles the other, its fize only excepted, for it weighs no

more than twelve ounces.

## THE WOODCOCK.

THE woodcock is fmaller than the partridge, and usually weighs about twelve ounces: it is fourteen inches in length, and twenty-fix in breadth. The bill is straight, and three inches long; the upper-part falling a little over the under at the tip: it is dusky towards the end, and reddish at the base: a black line extends from the bill to the eyes, and the forehead is of a reddish ash-colour. The head, neck, back, and coverts of the wings are irregularly barred with a kind of a red, black, grey, and ash-colour; but on the head the black predominates: the quill-feathers are dusky, indented with red marks: the lower-part of the body is of a dirty white, with numerous transverse lines of a dusky-colour, The

The tail, which confifts of twelve feathers, is dufky on one web, and has a red mark on the other: the tips are afh-coloured above, and white below. Their legs and feet are of a dufky pale colour, and the claws are divided to their origin. Their eggs are long, and of a pale red, with spots and clouds of

a deeper colour.

During summer these birds are inhabitants of the Alps of Norway, Sweden, and the northern parts of Europe. When the frost commences there, they go into milder climates, where the ground is open, and adapted to their manner of feeding: they leave England about the latter end of February, or the beginning of March; though they have been sometimes known to continue here. They separate soon after their arrival here, but they pair again before they return to their native haunts.

They quit France, Germany, and Italy in the same manner; making the cold northern fituations their general summer rendezvous. In the winter great numbers of them are seen as far south as Smyrna and Aleppo \*; and in

<sup>\*</sup> Ruffel's Hilt. Aleppo, 64,

the same season in Barbary. It has been said that some of them have appeared as far south as Egypt. Those which resort into the countries of the Levant perhaps come from the deserts of Siberia or Tartary, or the cold mountains of Armenia. It is said that woodcocks are unknown in North-America, and Mr. Banks afferts that they are not to be met with in Newfoundland. The slesh of the woodcock is esteemed a great delicacy,

#### THE GODWIT.

THIS is not much unlike the woodcock, though it is much larger: it is
fixteen inches in length, and twentyfeven in breadth: the bill is four
inches long, black at the end, and of a
pale purple at the base: the feathers of
the head, neck, and back, are of a
light reddish brown, marked in the
middle with a dusky spot. The rump
is remarkable for having a white ring.
These birds are taken in the same manner with the rusts and rees, and whea
sattened are esteemed a great delicacy.
In September they appear on our coasts

in fmall flocks, and remain with us the whole winter. Like the curlew, they walk on the open fands, and feed on infects.

The Red Godwit, which is not a very common species in England, is highly marked with red on the breast, and is more particularly distinguished by its bill, which is not quite straight, but a little reslected upwards.

Mr. Ray mentions a bird that he calls the Lesser Godwit, which weighs

about nine ounces.

# THE GREAT AMERICAN GODWIT.

THE bill of this bird is about four inches long, ftraight, and flender; and is of a bright yellow half way next the head, growing gradually dufky till it becomes black at the point. The eyes are more diftant from the bill than in other birds. The head and upperparts of the body are mottled with black and dark brown, except that the rump is brighter, with crofs-bars. The quills of the wings next the great ones are of an orange-colour marked with imall black spots. The belly and thighs are

of a brownish white; the thighs are naked far above the knees; and the legs and feet are covered with dusky scales.

The White North-American Godwit is wholly white, except the tail, the greater quills, and the small feathers on the ridge of each wing, which are of a dirty white. Its bill turns up towards the point, like that of the avosetta.

#### THE GREEN SHANK.

THESE birds appear in winter, in fmall flocks, on our coasts and wet grounds: the bill is two inches and an half; the upper-chap straight, and the lower reflecting a little upwards: the head and upper-part of the neck are ash-coloured, marked with small dusky lines: the coverts of the wings, the scapulars, and the upper part of the back are of a brownish ash-colour; the quill-feathers are dusky, their innerwebs being speckled with white: the breast, belly, thighs and tail are white; the latter being marked with undulated dusky bars. The legs, which are yellow, are long, slender, and bare above

two inches higher than the knees. The exterior toe is united to the middle toe as far as the second joint, by a strong membrane, which borders their sides to the very end. It is a bird of an elegant shape, but small, not exceeding fix ounces in weight.

The Spotted Red Shank is equal to the preceding in fize, and is principally diftinguished by the colour of its legs,

which is a very bright red.

#### THE SNIPE.

THE fnipe weighs about four ounces; and is in length, from the tip of the bill to the end of the tail, about twelve inches; in breadth it is fourteen inches. The bill is three inches long, straight, and of a dusky-colour. The head is divided lengthways with four black and three red lines: the chin is white, and the neck is varied with brown and red: the scapulars are beautifully stringed with black and yellow. The quill-feathers are dusky, but the edge of the first, and the tips of the secondary feathers are white: the breast and belly are white: the tail is dusky, marked with rust co-lour, and tipt with white; the legs are

of a palish green, and the claws are black.

The young of these birds are so often found in England, that it is doubtful whether they entirely leave this island; it is, however, certain that some of them continue with us all the summer, making their nests as well on the highest mountains, as in our low moors and marshes, and laying sour or sive eggs of a dirty olive-colour, marked with dusky spots. Their food is like that of the woodcock, and their sless his esteemed, as being tender, sweet, and delicate.

# THE JACK-SNIPE, OR JUDCOCK.

THIS is not above half the fize of a fnipe, its weight not exceeding two ounces. The crown of the head is black, tinged with rust-colour; and the neck is varied with white, brown, and a pale red: the scapular feathers are brown, bordered with yellow; the rump is of a glossy bluish purple; the belly white; the greater quill-feathers dusky; the tail feathers brown, edged with tawny; and the legs of an assection of the haunts and food

of this species are the same as those of the snipe. It is much less frequent among us, and very difficult to be found.

In this groupe of small birds of the crane kind a great many more might be added. We have enumerated those with the long bill; and shall just mention those which have shorter bills, under a collar of feathers round the neck of the male; namely, the rust, the knot, the sand-piper, the sanderling, the dunlin, the purre, and the stint.

After these follow the lap-wing, the green plover, the grey plover, the dottrel, the turnstone, and the sea-lark;

which have all very fhort bills.

These birds of the crane kind, which have short bills, are not, however, without proper provision for their sub-sistence. They run with surprizing rapidity along the surface of the marsh, or the sea-shore, quartering their ground with great dextenity, and leaving nothing of the insect kind that happens to lie on the surface.

In their feafons of courtship they pair like other birds; but not without violent contests between the males for the choice of the females. A little Q 2 bird

#### 172 The WATER-HEN and COOT.

bird of this tribe, called the ruff, has got the epithet of the fighter, merely from its great perseverance and ani-mosity on these occasions.

These birds usually breed in some island surrounded with sedgy moors, The eggs of where men seldom resort. all these birds are highly valued by the luxurious; though there is not much culinary art exercised upon them, for they are only boiled hard, and ferved up without any further preparation. The young of this class being soon hatched; they arrive at maturity foon after their exclusion. As the flesh of almost all these birds is in high estimation, variety of methods are used for taking them; and in particular the ruff and the reeve are greatly fought after, particularly in Lincolnshire and the isle of Ely. These are reckoned a very great deli-cacy, and it may not be amis to obferve, that the name of the male is the ruff, and that of the female the reeve.

#### THE WATER-HEN AND THE COOT.

THERE are two or three birds which seem to form the shade between waterfowls.

fowls, properly so called, and those of the crane kind. They, in some degree, partake of the form of the crane; and, though furnished with long legs and necks, rather swim than wade. They cannot, with propriety, be called web-sooted, though they are not entirely divested of membranes, with which their toes are fringed on each side, and which enable them to swim.

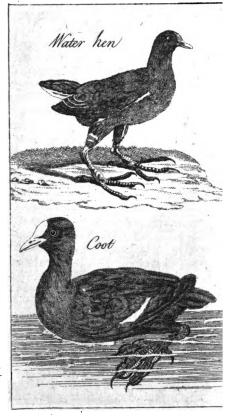
The water-hen and the coot fall under this class, and they have too near an affinity, not to be ranked in the fame description. They resemble each other in shape, they both have long legs, and thighs which are partly naked: their wings are short, their bills short and weak, their foreheads are bald and deflitute of feathers, their colour is black. and their habits are the fame. fize they are different; the water-hen weighing about fifteen ounces, and the coot twenty-four. In the coot, the bald part of the forehead is black; in the water-hen it is of a beautiful pinkcolour; the toes of the coot are edged with a fcolloped membrane; those of the water-hen are straight and narrower.

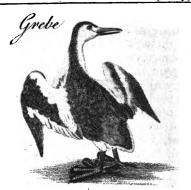
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#### 174 The WATER-HEN and COOT.

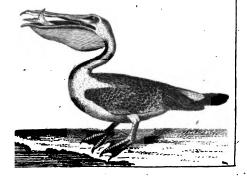
In their manner of living there is less difference than in their figures; the history of one will therefore serve for both. Birds of the crane kind are furnished with long wings, and can cafily change place; the water-hen, whole wings are short, never deserts the pond or river in which it seeks for provision, and the grassy banks which form the margin of those waters. Whether its food confifts of pond-weed, or water infects, is not absolutely certain; but pond-weed has been found in their stomachs. She makes her nest upon low trees and shrubs by the water-fide; it consists of sticks and fibres. The female lays twice or thrice in a fummer; her eggs are white with a tincture of green, and spotted with red. As foon as the young are excluded the egg, they swim in company with the parent, and imitate all her manners; but when they are able to provide for themselves, she drives them off to seek their fortune.

The coot, being a larger bird, is generally feen in larger streams, and more remote from mankind. The water-hen prefers inhabited situations, delighting in ponds, motes, and pools of water





# Pelican.



# The WATER-HEN and COOT. 175

water near gentlemen's houses; but the coot continues in rivers, and among rushy margined lakes; where it makes a nest of the weeds which are supplied by the stream, laying them among the reeds, stoating on the surface, and rising and falling with the water. It is supported by the reeds among which it is built, so that it is seldom washed into the middle of the stream: but, when this accident happens, which is sometimes the case, the bird sits in her nest, like a mariner in his boat, and, with her legs, steers her cargo into the nearest harbour.

To these birds, with long legs and finny toes, may be added one species more, with short legs and sinny toes: the bird I mean is the grebe. It is much larger than either of the former, and its plumage is black and white: its legs are calculated entirely for swimming, and not for walking; from the knee upwards they are indeed hid in the belly of the bird, and consequently have very little motion. It is on this account that they seldom leave the water, and usually frequent those shallow pools where their faculty of swimming can be turned to the greatest advantage, in sishing and pursuing their

prey. They chiefly frequent the meres of Shropshire and Cheshire, where they breed in a floating-nest among reeds and slags, which are kept steady by the reeds of the margin. The grebe preys upon sish, and is almost perpetually diving. Even in swimming, it shews little more than the head above water, and is extremely difficult to be shot, as it darts down on the least appearance of danger. It never appears on land, and, though frequently disturbed, will never desert that lake, where, by diving and swimming, it can find food and security.

These birds are principally valued for the skin of their breast, the plumage of which is of a most beautiful white, and as glossy as sattin. This part is made into tippets; but the skins lose their shining colour about February; and their breasts are entirely bare in

breeding-time.

### THE LESSER CRESTED GREBE,

THIS species is simaller than a teal; the head and neck are black; the throat spotted with white; the whole upper-fide

fide of a blackish brown, except the ridge of the wing above the first joint, and the tips of the middle quill-seathers, which are white; the breast, belly, and inner-coverts of the wings are white. A tust of long loose seathers hang backwards on each side behind the eyes. The irides are red, and the legs of a dirty green. A bare stripe of red extends from the hill to the eyes.

# THE WHITE AND DUSKY GREBE.

THIS is about the fize of a teal, and the bill is fomewhat more than an inch long. The crown of the head is dusky, as well as the whole upper part of the body: the inner-coverts, the ridge of the wing, and the middle quill-feathers are white; all the rest of the wing being dusky: the bill is joined to the eye by a bare skin of a fine red colour: the belly and the thighs are white, except a few black spots on the latter. In some birds the whole neck is ash-coloured.

This

This bird is frequently seen in Lincolnshire, where it breeds.

#### THE LITTLE GREBE,

THE length of this bird is ten inches, the breadth fixteen inches, and the weight about fix or feven ounces. The head is thick fet with feathers, which on the cheeks of old birds are of a bright bay. The top of the head, the neck, breast, and the whole upper-fide of the body are of a deep brown, tinged with red: the great quill-feathers are dusky; the belly is ash-coloured, mixed with a silvery white; and the legs are of a dirty green. These birds dive with great swiftness, and remain a long time under water their food is fish and water-plants. They frequent rivers, and form their nests in the water near the banks, which, not being fastened, rise and fall with the water. The female lays five or fix white eggs, which she always covers when she quits the nest. How they are hatched appears aftonishing, as the



the water rises through the nest, and always keeps them wet. The nest is about a foot thick, confishing of an amazing quantity of grass, and water-plants.

THE END OF VOL. VII.

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The great Creator did not bestow so much Curiosity and Workmanship upon his Creatures to be looked upon with a careles incurious Eye.

Derham's Phys. Theol. Book xi.

LONDON:

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### THE

### NATURAL HISTORY

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### ORNITHOLOGY.

## OF WATER-FOWL IN GENERAL.

HE first great distinction of waterfowl appears in the toes, which
are webbed together for swimming. Those who have observed the
feet or toes of a duck, will easily conceive how admirably they are formed
for moving in the water. Men, when
they swim, do not open the singers, so
as to let the fluid pass through them;
but closing them together, present one
broad surface to beat back the water, and
B 3
thus

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thus push their bodies along. What man performs by art, nature has sup-plied to water-fowl; and has webbed their toes together, so that they expand two broad oars to the water; and thus, moving them alternately, with the greatest ease, paddle along. We must observe also, that the toes are so contrived, that as they strike backward, their broadest hollow surface beats the water; but as they gather them in again, for a fecond blow, their front furface contracts, and does not impede the

bird's progressive motion.

Their toes are not only webbed in the most convenient manner, but their legs are also fitted for swift progression in the water. The legs of all are short, except the flamingo, the avosetta, and the corrira: all which, for that reason, I have ranked among the crane kind, as they make little use of their toes in swimming. Except these, all webfooted birds have very short legs; and these strike while they swim with greater facility. Were the leg long, it would act like a lever whose prop is placed to a disadvantage; its motions would be flow, and the labour of moving it confiderable. For this

reason, the very few birds whose webbed feet are long, never make use of them in swimming; the web at the bottom seems only of service as a broad base, to prevent them from sinking while they walk in the mud; but it otherwise rather retards than advances their motion.

In the web-footed kinds, the shortness of their legs renders them as unfit for walking upon land, as it qualifies them for fwimming in their natural element. Their stay, therefore, upon land, is but short and transitory; and they feldom breed far from the sides of those waters where they usually remain. In their breeding feasons, their young are brought up by the water-fide; and they are covered with a warm down, to fit them for the coldness of their situation. The old ones also have a closer, warmer plumage, than birds of any other class. Our beds are composed of their feathers; as they neither mat nor imbibe humidity, but are furnished with an animal oil, that glazes their furface, and keeps each separate. In some, however, this animal oil is in too great abundance; and is as offensive from its fmell, as it is serviceable for the purposes

## Of WATER-FOWL in general,

of houshold economy. The feathers, therefore, of all the penguin kind, are totally useless for domestic purposes; as neither boiling nor bleaching can divest them of their oily rancidity. Indeed, the rancidity of all new feathers, of whatever water-fowl they be, is so disgusting, that our upholsterers give near double the price for old feathers that they afford for new.

The skin of water-sowl is also generally lined with fat; so that, with the warmth of the seathers externally, and this natural lining more internally, they are better desended against the changes or the inclemencies of the weather, than any other class what.

ever,

As, among land-birds, so also among these, there are tribes of plunderers, that prey not only upon fish, but sometimes upon water-sowl themselves. There are likewise more inossensive tribes, that live upon insects and vegetables only. Some water-sowls subsist by making sudden stoops from above, to seize whatever fish come near the surface; others again, not furnished with wings long enough to fit them for

for flight, take their prey by diving after it.

All water-fowl naturally fall into three distinctions. Those of the gullkind, that, with long legs and round bills, fly along the furface to feize their prey. Those of the penguin-kind, that, with round bills, legs hid in the abdomen, and short wings, dive after their prey: and, thirdly, those of the goose-kind, with flat broad bills, that lead harmles lives, and chiefly subsist upon vegetables and insects.

The gull-kind are active and rapacious; constantly, except when they breed, keeping upon the wing; fitted for a life of rapine, with sharp straight bills for piercing, or hooked at the end for holding their fishy-prey. In this class we may rank the albatross, the cormorant, the gannet or Soland-goofe, the shag, the frigate-bird, the great brown gull, and all the leffer tribe of

gulls and fea-swallows.

The penguin kind, with appetites as voracious, bills as tharp, and equally eager for prey, are yet unqualified to obtain it by flight. Their wings are short, and their bodies large and heavy, to that they can neither run nor fly.

But But they are formed for diving in a very peculiar manner. To this class we may refer the penguin, the auk, the skout, the sea-turtle, the bottle-nose, and the loon.

The goofe-kind are easily distinguishable, by their flat broad bills, covered with a skin; and their manner of feeding, which is chiefly upon vegetables. In this class we may place the swan, the goofe, the duck, the teal, the widgeon, and all their numerous varieties.

## THE PELICAN.

MANY writers, lovers of the marvellous, have related strange things of this bird, which have been credulously received by others, and drawn into example; especially the tales they have told respecting the bird's remarkable regard for its young. Separate from fable, there is sufficient in the pelican to attract our most serious notice, and to claim our best reslections.

The beak of the pelican is peculiar and uncommon; as we shall soon shew; for the rest, it is in almost all respects like a swan; the body is as large, the peck is nearly as long; the legs are as

short as in that bird, and the feet are black, very broad, and webbed in the fame manner. The bird is also throughout of a whitish colour, though not of the pure white of the fwan, except that the tips of some of the feathers near the beak and wings are black. The bird is so bulky and unwieldly, that it is fit only for the waters, though its feet being not placed to backward as in the Iwan, and iome others, it walks better. Its note is very loud and strange for a bird: its voice, say some, resembles the braying of an ass; while others rejoin, that there requires some fancy to make out the resemblance. Bochart nemarks, that as the Pialmist in Pial. cii. 6. compares himself to two birds. with respect to his moaning and lamentation, there must be something querulous and lamentable in the notes of thefehirds: and the pelican, adds this great man, is a bird of horrid voice, which very much resembles the lamentation of a man grievoully complaining \*. "By reason of the voice of my groaning-my bones, &c.-I am like a peli-can of the wilderness: I am like an owl of the defert."

Buchart Hierozoicon, Far. ii. p. 295.

The beak of the pelican is very large and long: it is above a foot in length, and of the thickness of a child's arm at the bottom: the colour is bluish and yellowish, and the point is very sharp. The upper chap of it is formed, as in all other birds; but the lower is unlike every thing in nature: it is not composed of one solid piece, as in all other birds; but is made of two long and flat ribs, with a tough membrane connected to one and to the other: this is also extended to the throat, and is not tight, but very broad and loose, so that it can contain a vast quantity of any kind of provision.

The bird frequents the waters both fresh and salt, and seeds voraciously on sistes and water insects: but though it frequents those places, its favourite residence is in remote uncultivated forests and wildernesses, where it can remain quite undisturbed: its wings are long, and it easily slies backward and forward. In these places it builds, and there it breeds up its young, so that the pelican of the wilderness or desert, is no improper phrase: though some simall dabblers in natural knowledge have thought so, and on that account objected

objected to the facred Scriptures. Now the pelican is to carry food for a numerous brood, as ravenous as herfelf, to these remote places: and this vast bag which nature hath given her at the throat, is the contrivance for the carrying of it. Who can refuse to see in this the wisdom and goodness of the allwife Creator! In this bag she stores what she has caught, and flying away to the distant place of her residence this anxious and laborious parent feeds her young from that repolitory. If some person in early time, quite unacquaint-ed with the history of the bird, saw her alight in the midit of a defert, among a broad of ravenous young ones, and feed them from this bag, it would not be unnatural for him to suppose, however strange the thing must be in itself, that it was with her own blood she fed them. Thus arose, from a mistake, the ftory of this wonder, which faithful ignorance has propagated through fo many ages; and which moralists and poets have from the earliest times drawn into an emblem of paternal affection. Though certainly, without any reference to things falle and marvellous, there is sufficient instruction for parents, from

from the labour, diligence, and amazing storge which God hath planted in this pelican of the wilderness!

In the year 1745, there was a pelican shewn in London, brought by captain Pelly from the Cape of Good Hope, where they are larger than any where else; and of which I find the following account in Edwards's History of Birds. "From the point of the bill to the angle of the mouth is twenty inches of our English measure, which is fix inches more than any natural historian has found it: the academy of Paris having measured one which was about fourteen inches, Paris measure I suppose; and our countryman Willoughby measured one, brought from Russia, which he makes fourteen inches English. thought it something incredible in Willoughby's description, that a man should put his head into the pouch under the bill; till I faw it performed in this bird by its keeper, and am fure a fecond-man's head might have been put in with it at the fame time." He also observes, that the skin round the eye is bare of feathers, and the pouch, when dry, appears of the confistence and colour of a blown dry ox's bladder, having fibres

fibres running its whole length, and blood-vessels crossing them, and proceeding from the sides of the lower-part of the bill, which opens into this pouch its whole length. It is thought to be a very long-lived bird; some writers say, it lives to fixty or seventy years. It seems to inhabit the greatest part of the old world, it being sound in many climates both north and sound in many climates both north and south, as well as the intermediate latitudes: it being pretty common in Russia, and abounding in Egypt.

Father Morolla, in his voyage to Congo, informs us, that in his journey to Singa, he observed certain large white birds, with long beaks, necks and feet, which whenever they heard the least found of an instrument, began immediately to dance and leap about the rivers, where they always reside, and of which they are great lovers: this, he faid, he took a great pleasure to contemplate, and continued often upon the banks of the rivers to observe.

Let the atheist then, who doubts or disbelieves the being of God or the creation of this world by omnipotent wisdom, let him only turn his eyes C & upon

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upon this extraordinary bird, and ask his own heart, whether he can really believe such a creature the work of chance! Let the parent contemplate the pelican, and from its admirable regard to its young, and the furprizing provision made by Providence for their support, learn the power and the excellence of parental storge; and blush to be exceeded by an irrational creature! And from the view, let the christian learn dependence upon his God, who having so wisely, and wonderfully provided for the nourishment and preservation of the animal world, will undoubtedly take due care of their temporal as well as eternal welfare, who with the humility, chearfulness, love and submission of children, submit themselves to the will of their Father and God.

The flesh of this bird however smells very rancid, and tastes worse than it smells. The native Americans kill vast numbers: not to eat, for they are not even fit for the banquet of a sawage; but to convert their large bags into purses and tobacco-pouches. They also dress the skin with salt and ashes, rubbing it well with oil, and then forming

forming it to their purpose. It thus becomes so soft and pliant, that the Spanish women sometimes adorn it with gold, and convert it into works bags.

### THE ALBATROSS.

THIS may be faid to be one of the first of the gull-kind: it is one of the largest and most formidable birds of Africa and America. Its body is larger than that of the pelican, and its wings, when extended, measure ten feet from tip to tip. The bill, which is yellowish, is six inches long, and terminates in a crooked point: the top of the head is of a lightish brown; the back is of a dark brown, spotted with black; and the belly is white. The toes are webbed, and of a slessh-colour.

This bird inhabits the tropical climates, and is also seen as far as the streights of Magellan in the South-Sea. It is one of the most formidable of the aquatic tribe; not only living upon sith, but also upon water-sowl. Like all the gull-kind, it preys upon the wing; and chiefly pursues the slying-sith, that are forced from the ocean by

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the dolphins. Our feas appear to be forfaken by every class of animated nature: but in the tropical feas, and the fouthern latitudes beyond them, various species of the gull-kind are seen hovering on the wing, at a thousand miles distance from the shore. The slying sish are continually rising to eicape from their pursuers of the deep, only to encounter equal dangers in the air.

If we may credit Wiquefort, these birds are often seen sleeping in the air, entirely remote from land, with their head under one wing, and the other employed in beating the air. We will not presume to vouch for Mr. Wiquefort's veracity, but it is certain that sew birds sloat upon the air with more ease than the albatros; or support themselves a longer time in that element.

The albatross has a peculiar affection for the penguin, and a pleasure in its society. Captain Hunt, who for some time commanded at our settlement upon Falkland islands, says he was often amazed at the union preserved between these two birds, and the regularity with which they built together. In that

that desolate spot, where the birds never dreaded the encroachments of men, they were seen to build with an amazing degree of uniformity; their nests covering fields by thousands, and resembling a regular plantation: but since they have been disturbed by men, the society is broken up, and the nests are totally destroyed.

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## THE CORMORANT.

THE cormorant may be distinguished from all other birds of this kind, by its four toes being united together by membranes; and the middle toe being notched like a faw, to affift it in holding its fifty prey. This species weighs about four pounds: it is thirty-two inches in length, and almost four feet in breadth. The bill, which is three inches and an half long, is dufky, and deflitute of nostrils: the base of the Jower chap is covered with a naked yellowith ikin, that extends under the chin, forming a kind of pouch. The head and neck of this bird are of a footy blackness, and the body thick and heavy; more resembling the figure of a goofe than that of a gull.

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These birds occupy the highest parts of the cliffs impending over the sea; their nests are composed of sticks, seatang, grass, &c. in which they lay six or seven eggs, which are white, and of an oblong form. At the approach of winter, they are seen dispersed along the sea-shore, and ascending up the mouths of fresh-water rivers, carrying destruction to all the sinny tribe. They are remarkably voracious, having almost sudden digestion: their appetite is for ever craving, and never satisfied; and this hunger is promoted by the vast quantity of small worms that fill their intestines.

With the grossest appetites, this bird has the rankest and most disagreeable smell of any bird, even when alive. Its form is disagreeable; its voice hoarse and croaking, and its qualities obscene. Milton, with great propriety, has made Satan personate this bird, to survey undelighted the beauties of Paradise, and sit on the Tree of Life \* devising Death.

This bird seems to be of a multiform

This bird feems to be of a multiform nature, and, wherever fish are to be found, watches their migrations: it

<sup>\*</sup> Paradife Loft, book iv. 4. 194, &c.

pursues its prey in fresh-water lakes, as well as in the depths of the ocean; and preys by night as well as in the day-time. It is feldom seen in the air, except where there are fish below, and they must be near the surface, before it will venture to souse upon them. It feldom makes an unsuccessful dip, and often rises with a larger fish than it can readily devour.

# THE GANNET, OR SOLAND GOOSE.

THE gannet weighs about four pounds, and a quarter: it is three feet one inch in length, and fix feet two inches in breadth. It is indeed about the fize of a tame goofe, but its wings are longer. The bill is fix inches long, flraight almost to the point, where it inclines down, and the sides are irregularly jagged, that it may hold its prey with greater fecurity. It differs from the cormorant in size, being larger; in its colour, which is chiefly white; and having no nostrils, but in their stead a long furrow, extending almost to the end of the bill. The eyes, which are full of vivacity, are surrounded with a naked

naked skin of a fine blue. A narrow flip of black bare skin, extends from the corner of the mouth to the hind part of the head; beneath the chin is another, that can be dilated like the pouch of the pelican, and is capable of containing five or fix herrings. The neck is very long, the body flat, and very full of feathers.

Each bird, if left undisturbed, would only lay one egg in the year; but if that be taken away it will lay another; if robbed of that, then a third. A wife provision of nature to prevent the extinction of the species by accidents, and to supply food for the inhabitants of the places where they breed. The egg is white, and smaller than that of the common goose; the nest is large, and composed of grass, sea-plants, shavings, &c.

As these birds subsist entirely upon fish, they frequent those uninhabited islands where their food is found in plenty, and where they are undiffurbed by mankind. The isle of Ailsa, in the fyrth of Clyde; the rocks adjacent to St. Kilda, a small isle near the Orkneys, the Skelig islands off the coasts of Kerry, in Ireland; and the

Bass isle, in the fyrth of Edinburgh. In the last mentioned island, Dr. Harvey affirms that the surface is almost wholly covered, during the months of May and June, with nests, eggs, and young birds; so that it is scarcely possible to walk without treading on them. The rocks of St. Kilda seem to be as much resorted to by these birds, and the inhabitants of that small island are principally supported by them and their

eggs throughout the year.

The gannet is a bird of passage: its first appearance in those islands is in March; and it quits them in August or September; according as the inhabitants take or leave the first eggs. Its motions may probably be determined by the migrations of the immense shoals of herrings, that come pouring down at that season through the British channel, and supply all Europe as well as this bird with their spoil. The gannet assiduously attends the shoal in their passage, accompanies them in their whose circuit round our island, and shares with our sistemment this exhaustless banquet. Whenever the gannet is seen it is sure to announce

## 24 The GULL and PETREL.

e fishermen the arrival of the finny

These birds are well known on most of our coasts, but not by the name of the Soland goose. They are called gannets in Cornwall and Ireland, and even in Wales. Gannets are sometimes taken at sea by the following deception: the sishermen sasten a pilchard to a board, and leave it floating, which alluring bait decoys the unwary gannet to its own destruction.

### THE GULL AND PETREL

THE larger gulls live at the most remote distance from man; the smaller reside wherever they can take their prey; and visit the most populous places, when solitude can no longer grant them a supply. In this class the gull, properly so called, may be placed; of which there are upwards of twenty different kinds; the petrel, of which there are three; and the sea-swallow, of which there are about the same number. Gulls are to be distinguished by an angular knob, on the lower-chap; petrels by being destitute of this







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this knob; and fea-swallows by their bills, which are sharp-pointed, straight, and slender. In their appetites and places of abode they all perfectly

agree.

The gull, and all its varieties, is feen with a flow-failing flight hovering over rivers to prey upon the smaller kinds of fish; it follows the ploughman in fallow-fields to pick up insects; and, when living animal food is not to be obtained, it has no objection to carrion, or any thing of the kind that offers. But it is chiefly round our boldest rockiest shores that they are feen in the greatest abundance. It is on such shores that the rocks offer them a retreat for their young, and the fea is a fufficient supply. In the cavities of these rocks, of which the shore is composed, infinite variety of sea-fowls re-tire to breed in safety. The waves beneath, beating continually at the base, often wear the shore into an impending boldness; so that it appears to jut over the water; while the raging of the fea makes the place inaccessible from below, .

Like all birds of the rapacious kind, the gull lays but few eggs; fometimes

## 26 BIRDs of the PENGUIN KIND.

one, fometimes two, but never more than three; it builds on the ledges of a rock, and its nest consists of long grass and sea-weed. Most of the kind have a fishy taste, with black stringy tlesh; but the young are better food; and of these the poor inhabitants of our Northern islands, make their wretched banquets. They are almost strangers to any other food, and even salted gull may be relished by those who know no better.

# OF BIRDS OF THE PENGUIN KIND.

THESE birds are not long-winged and swift flyers like those of the gull kind: they are indeed but indifferently formed for flight, and still less for walking. The duck is not half so unwieldly an animal as the whole tribe of the penguin kind. The largest of them, which have a thick heavy body to raise, are totally unable to fly; their wings only serving them as paddles to help them forward, when they attempt to move swiftly. Even the smaller kinds seldom fly by choice; they laboriously flutter their wings without making much.

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progress, and, though they have but a small weight of body to sustain, they are unwilling to quit the water, which affords them both food and protection.

The legs of this whole tribe are still more aukwardly adapted for walking. All above the knee feems hid within the belly, and nothing appears but two Thort legs, as if they were stuck under the rump, and upon which the animal is very indifferently supported. Their Thort legs drive the body in progression from fide to fide; and, without the affistance of the wings, they could not move much faster than a tortoise: but this aukward position of the legs, suits them admirably for a refidence in water. In that element, the legs being placed behind the body, pushes it forward with greater velocity.

They are also well qualified for diwing: by inclining their bodies forward, they lose their center of gravity; and every stroke from their feet only, tends to fink them the faster. They can either dive at once to the bottom, or swim between two waters; where they continue in pursuit of their prey for fome minutes, and then ascending to catch breath, plunge in again to renew their

their operations. Hence it is that birds of the penguin kind, which are so defence ess, and so easily taken by land, are impregnable by water. When they are pursued, they immediately sink, and shew nothing more than their bills,

till the enemy is withdrawn.

They never visit land, except when they come to breed: that part of them which is continually in the water is white, but the back and wings are of different colours, according to the different species. They have a warmer covering of feathers than any other bird; so that the sea appears to be their natural element; and were it not for the necessary duties of propagating the species, we should have no opportunity of seeing them, and should be utterly unacquainted with them.

## THE MAGELLANIC PENGUIN.

THE Magellanic penguin is the largest and most remarkable of the kind: it is not much inferior in fize to the tame goose. It cannot fly, its wings being very short, covered with stiff hard feathers, always expanded and hanging uselessly down at the sides

of the bird. The upper part of the head, the back, and the rump are covered with stiff black feathers; but the belly and back are of a snowy whiteness, except a line of black which crosses the crop: that half of the bill, which is towards the base, is black and covered with wrinkles, but is marked crosswife with a stripe of yellow.

These birds walk erect with their heads on high, their fin-like wings hanging down like arms. Fish is their only food, and they seldom come ashore but in the breeding season: they dive with great rapidity, and are extremely voracious. In consequence of this gluttonous appetite, their slesh is rank and fishy: though our sailors admit it

to be tolerable good eating.

They are birds of society, and, when they come on shore, are seen drawn up in rank and file, upon the ledge of a rock, standing together with the albatros, as if in consultation. This is previous to their laying, which in the part of the world usually begins in the month of November; a small depression in the earth, without any materials, constitutes their nest. The progress of incubation is carried on P 3

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very rapidly by the heat of their bodies and the warmth of their feathers.

The manner of this bird's neftling is different in other countries: in some places, instead of being satisfied with a superficial depression in the ground, it burrows two or three yards deep; in others it forfakes the level to clamber up the ledge of the rock, where it lays its fingle egg and hatches. Sometimes three or four take possession of one hole, and hatch their young together, the holes of the rocks, where nature has made them a retreat. Linnæus affures us that several of this tribe are seen together. There the female lays her egg (for the never lays more than one) in a common nest; while one is placed as a centinel to give warning of approaching danger. The egg of this penguin is very large for the fize of the bird, and generally exceeds that of a goofe in magnitude. But as there are many varieties of the penguin, and as they differ in fize, from that of a Muscovy duck to a swan, the fize of their eggs are proportionally different.

The black-footed penguin, mentioned by Edwards, has four toes, and

Birds of the Penguin Kind. 31 its wings are destitute of quill fea-

THE AUK, THE PUFFIN, AND OTHER BIRDS OF THE PENGUIN KIND.

THERE is a numerous tribe of birds of nearly the fame form, manners, and appetites as the penguin, though far inferior in fize. They live upon the water, in which they are continually feen diving; and feldom venture upon land, except for the purpose of breeding.

The Great Northern Diver is the first of this fmaller tribe, and is nearly of the fize of a goose. It differs from the penguin, in being much slenderer and more elegantly formed, and is all over-beautifully variegated with stripes.

The Grey Speckled Diver is not larger than the Muscovy duck, and refembles the great northern diver in every particular except fize.

The Auk, which breeds on the island of St. Kilda, chiefly differs from the penguin in fize and colour. It is not to large as a duck; and the whole of the breast and belly is white.

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The Guillemot is nearly of the same fize as the auk, but has a longer, a flenderer, and a straighter bill.

The bill of the Puffin is different from that of any other bird: it is flat, with its edge upwards, of a triangular figure, and ending in a sharp point: the upper part is bent a little downward, where it is joined to the head; and the base is encircled with a certain callous substance, like that of parrots. It is ash-coloured near the base, and red towards the point. The eyes, which are grey, are furrounded with a protuberant ikin of a vivid colour. The legs of this bird are formed like those of the rest of the tribe; it is therefore with difficulty that it rifes, and it frequently falls before it gets upon the wing; but as it is a small bird (not exceeding a pigeon in fize) when it once rifes, it can continue its flight with great facility.

These and all the smaller birds of the penguin kind, make no kind of neft, but lay their eggs either in the crevices of rocks, or in holes under ground near the shore. The latter fituation is generally made choice of, because the auk, the puffin, the guillemot, and

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many others, cannot easily rise to the nest when it is in a losty situation. Sometimes indeed by rendering them inaccessible to mankind, they make them almost inaccessible to themselves; and are frequently seen making several efforts before they can arrive at the place of incubation. On this account the auk and guillemot, when they have once laid their egg, seldom forsake it till it is excluded. During this period the male, which is better surnished for flight, feeds the semale: and the place where she sits is so bare, that, were not the egg supported by the body of the bird, it would frequently roll down from the rock.

These birds are absent all the winter, visiting regions too remote for discovery. A few of them, which come as spies, are seen about the latter end of March, which, after staying two or three days, depart, and return again in the beginning of May, with the whole army of their companions. But if the season happens to be stormy and tempestuous, they are sound in vast quantities cast away upon the shores, leave and perished with samine. It is imagined, therefore, that this voyage is performed

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## 34 BIRDs of the PENGUIN KIND.

performed more on the water than in the air; and, as they cannot feize their prey in stormy weather, their strength is exhausted before they arrive at their

destined port.

Near the isle of Anglesea in an islet, called Priesholm, their flocks are so large as to be compared to swarms of bees. In another iflet, called the Calf of Man, birds of this kind, though of a different species, are seen in great abundance. Numbers of rabbits breed in both these places; and the puffin, not choosing to be at the trouble of making a hole, when there is one already made, dispossesses the rabbit, and probably destroys the young. In these unjustly acquired retreats, the young puffins are found in great abundance, and become a valuable acquisition to the natives of the place. Though their flesh is very rank, yet, when pickled and preserved with spices, they are admired by those who are fond of high eatīng.

This whole tribe is feen to take leave of their fummer residence in August. The coldest countries seem to be their most favoured retreats; and the number of water-fowl is much greater in

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those colder climates, than in the warmer regions near the line.

### THE WILD SWAN.

THESE birds frequent our coasts in large flocks when the winters are fevere; but we cannot learn that they ever breed in Great-Britain. We are informed by Martin \*, that they come in October in great numbers to Lingay, one of the Western isles; where they continue till March, and then retire more northward to breed. These, like most other water-fowl, prefer for that purpose those places that are least frequented by mankind: the lakes and forests of the distant Lapland are therefore filled, during fummer, with myriads of water-fowl; and fwans, geefe, the duck tribe, divers, &c. pass that season there; but in autumn return to us, and to other more hospitable shores.

The wild swan is less than the tame by almost a fourth; the former weighing but fixteen pounds and three quarters, and the latter twenty pounds. The

tame

Defer. West. Isles, 71.

tame fwan is entirely white; but the wild bird is of an afh-colour along the back, and on the tips of the wings; the eye-lids are bare and yellow, and the legs are dusky. The cry of the wild swan is very loud, and may be heard at a great distance; it is therefore sometimes called the hooper.

### THE TAME SWAN.

THE fwan was confidered as a high delicacy among the antients, and the goose was abstained from as totally indigestible. Modern manners have inverted tastes; the goose is now become the favourite, and the swan is seldom brought to table, except for the pur-

poses of oftentation.

The swan is the largest of the British birds: it is distinguished from the wild swan by its size, which is much larger, and by the bill, which in the tame bird is red, and the tip and side black: a black callous knob projects over the base of the upper chap. In old birds, the whole plumage is white, and, in young ones, ash-coloured. The legs are dusky. The swan lays seven or eight white eggs, which she is near two months.

months in hatching. Its chief food is herbs growing in the water, roots and feeds growing near the margin, and infects. No bird perhaps makes so inelegant a figure out of the water, or has the command of such beautiful attitudes in that element as the swan. Almost every celebrated poet has taken notice of it, and Milton thus describes it.

The fwan with arched neck Between her white wings mantling, proudly rows Her flats with oary feet.

There is not a more beautiful figure in all nature: in the exhibition of its form, there are no broken or harfn lines, no conftrained motions; but the roundest contours; and the easiest transitions.

It is extremely difficult to reconcile. The accounts of the ancients with the experience of the moderns, concerning the vocal powers of this bird. The tame swan is one of the most filent of animals, and the wild one has a loud and very disagreeable note: there is not the smallest degree of melody in

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either,

Par, Loft, b. vii.

either, and yet it was the general opinion of antiquity that the swan was a most melodious bird. But while Plato, Aristotle, and Diodorus Siculus believed the vocality of the swan, Pliny and Virgil seem to doubt that received opinion. The ancients had perhaps some mythological meaning in ascribing melody to swans; for, when Virgil speaks of them siguratively, he ascribes to them melody, or the power of music; but when he talks of them as birds, he lays aside siction, and, like a true naturalist, gives them their real note.

The antients held a still more singular opinion, imagining that the swan fore-told its own death: this is doubtless a poetical slight; and, as to their being supposed to sing more sweetly at the approach of death, the cause is beautifully explained by Plato, who attributes that unusual melody to the same fort of extacy that good men are sometimes said to enjoy at that awful hour, foreseeing the joys that are preparing for them on putting off mortality.

: All the stages of the swan's approach to maturity are slow, and seem exprestive of its longevity. Pliny observes that that those animals which are the longest in the womb are the longest lived; the swan is the longest in the shell of any bird we know, and it is a year in growing to its proper size. It is said a swan will live three hundred years; and Willoughby, who cannot be accused of easy credulity, is inclined to believe the report. A goose, as he justly observes, has been known to live an hundred years; and the swan being a larger bird, and its slesh of a sirmer texture, may be supposed to live much longer.

Swans were formerly so much esteemed in England, that by an act of Henry IV. c. 6. no one, except the king's son, was permitted to keep a swan, unpossessed of a freehold of sive marks a year. And by stat. 2. Henry VII. the punishment for taking their eggs, was imprisonment for a year and a day, and a fine at the king's pleasure. At present they are less valued for the delicacy of their sless, but great numbers of them are still preserved for their beauty. They are in great abundance on the Thames and the Trent, and particularly on the salt water inlet of the sea, near Abbotsbury, in Dorset-shire.

Ę 2

By the antients the fwan was conferrated to Apollo and the muses. It was also confecrated to Venus, probably on account of its extreme whiteness: the car of that goddess is sometimes drawn by swans.

## THE GOOSE.

THE goose, in its wild state, always retains the same marks; the whole upper part is ash-coloured; the breast and belly are of a dirty white; the quill seathers and the tail are dusky, the latter being edged with white; the bill is narrow, black at the base and tip, and red in the middle; the legs are of a saffron colour, and the claws are black. In its domestic state the goose, as well as other animals, vary almost infinitely in their colours.

The wild goose is supposed to breed in the retired parts of the north of Europe; and, at the approach of winter, to descend into more temperate regions. These birds are often seen in flocks from fifty to an hundred, slying at very great heights, and preserving great regularity in their motion; sometimes

times forming a straight line; at other times assuming the shape of a wedge, which facilitates their progress. Their cry is frequently heard when they are at an imperceptible distance above us. It is probable that this is a note of mutual encouragement, as they seldom exert it when they alight in those journies. When they alight in those journies. When they descend to the ground nies. When they descend to the ground, they range themselves in a line, like cranes; and seem rather to have come down for rest, than for any other refreshment. When they have continued in this fituation for an hour or two, one of them has been heard to found a kind of charge, with a loud note, which has been punctually attended to by the others, and they have imme-diately pursued their journey with re-

newed alacrity.

The wild goose, and many other varieties, agree in one common character of feeding upon vegetables, and being remarkable for their fecundity; but the tame goose is the most fruitful of the kind. Having very few enemies, it leads a safer and more plentiful life, and its prolific powers encrease in proportion to its ease: it is frequently known to lay upwards of E 3 twenty

twenty eggs, but the wild goole seldom exceeds eight. The tame female is very assiduous in hatching her eggs, during which time she receives two or three visits in the day from the gander; who sometimes drives her from the ness to take her place, which he sills with

great state and composure.

When the young are excluded, the pride of the gander is inconceivable; a midering himself as a champion to defend his young, and to keep off even the suspicion of danger, he pursues dogs and men that never attempt to molest him; and when he has attempted to attack a mastisf, or any other animal, to whose contempt alone he is indebted for his safety, he returns in triumph to his semale and her broad, foreaming and clapping his wings, as if conscious of having obtained a vicatory.

The flesh of a young goose is certainly very good eating; but the value of this bird is greatly encreated by its fathers. Not to mention the quills, which are so easily converted into pens, and thereby become essentially useful to the scholar, the lawyer, and the trader, the scathers are highly valuable in another capacity, as the warmest and softest beds are made of them.

Most of our beds in Europe are composed of goose-feathers; though the
use of them is utterly unknown in the
countries bordering upon the Levant,
and in all Asia. They have mattresses,
stuffed with wool, camel's-hair, or
cotton; the warmth of their climate
rendering a softer bed unnecessary. It
is however surprizing that feather-beds
were not in use among the ancients:
Pliny indeed informs us that they made
bolsters of feathers to lay their heads
on; but this is an additional proof that
they were not used for the body to repose on.

Vast quantities of tame geese are kept in the sens in Lincolnshire, which are plucked about the neck, breast, and back once, if not twice a year. These seathers are a considerable article of commerce; but those of Somersetshire are most esteemed by the trade; as those of Ireland are reckoned the worst, Hudson's-Bay furnishes very fine sear thers, supposed to be of the goose kind, The down of the swan is imported from Pantzick, from whence we also receive

a great quantity of the feathers of the cock and the hen.

mark; the ducks which furnish it being inhabitants of Hudson's-Bay, Greenland, Iceland, and Norway.

Feathers are cured by laying them in a room in an open exposure to the sun, and, when dried, putting them in bags, and beating them well with poles to get the dirt off. Nothing, however, but time, will prevent the smell which arises from the putrefaction of the oil contained in every feather: laying upon them is the only remedy; old feathers are therefore much more valuable than new.

Geese are very profitable to the samer for their sless, their seathers, and their grease. They will live upon commons or any fort of pastures, and need very little care or attendance; only they should have plenty of water. The largest geese are reckoned the best but there is a fort of Spanish geese, that is a much better layer and breeder than the English, especially if the eggs are hatched under an English goose.

Geefe

Geete should lay in the spring, the earlier the better; because of their price, and their having a second brood. They usually lay twelve or sixteen eggs. You may know when they will lay, by their carrying straw in their mouth; and when they will sit, by their continuing on their ness after they have tinuing on their nefts after they have laid. A goose fits thirty days; but if the weather be fair and warm, they will hatch three or four days fooner. After the gollings are excluded, some keep them in the house ten or twelve days, and feed them with curds, barley-meal, bran, &c. and when they have acquired fome ftrength, let them out four or five hours a day, taking them in again, until they are large enough to defend themselves from vermin. Others put them out at first, and perhaps succeed as well as the former. One gander is sufficient for five geese.

If you would fat green-geefe, you must thut them up when they are about a month old, and they will be fat in about a month more. Be sure to let them have always by them, in a small rack, some fine hay, which will greatly hasten their fatting. But for fatting of older geefe, it is commonly done when

when they are about fix months old, in or foon after harvest, when they have been in stubble-fields, from which food some kill them. But those who are defirous of having them very fat, should shut them up, for a fortnight or three weeks, and feed them with oats, split beans, barley-meal, or ground malt mixed with milk; but the best thing to fatten them with is malt mixed with beer. You must however observe in fattening all forts of water-fowl, that they usually fit with their bills upon their rumps, where they suck out the greatest part of their moisture and fatness, at a small bunch of feathers; which you will find stand-ing upright on their rumps, and always moist, with which they trim their feathers, which renders them more oily and flippery than the feathers of other fowls, and causes the water to slip off them. If therefore these upright feathers are cut away close, they will be-come fat in less time, and with less meat than otherwise. Geese will likewise feed on, and fatten well with carrots cut small and given them; or if you give them rye before, or about Midsummer, it will strengthen them, .and

and keep them in health, that being commonly their fickly time.

# THE WHITE-FOOTED WILD GOOSE.

THIS bird is frequently feen in winter in the marshes of Cheshire, and in all the northern world as far as Hudion's-Bay. It is twenty-eight inches in length, and four feet and an half in breadth, and weighs about five pounds: the bill is much thicker and larger than that of the common wild goose, and is of a reddish yellow: the forehead white, the head brown, and the upper part of the breast of a light ash-colour, clouded with a deeper. The belly is white, spotted with black; the coverts of the wings are grey, edged with brown. The tail is black, edged with white: the legs are orange colour, and the claws of a pale flesh colour.

## THE BARNACLE.

THE length of this bird is about two feet and one inch; the breadth four feet five inches, and the weight about five pounds; the bill is black

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and not quite two inches long: the head is small, and the sorehead and cheeks white; and a black line extends from the bill to the eyes: the neck, the hind-part of the head, and the upperpart of the breast and back are of a deep black: the belly and the coverts of the tail are white; the back, scapulars, and coverts of the wings, are beautifully barred with grey, black, and white: the tail and legs are black.

During winter, these birds appear in vast slocks, on the north-west coasts of this kingdom. They are naturally very wild and shy; but, when taken, grow as familiar as our tame geese in a very sew days. They quit our shores in February, and go to breed in Lapland, Greenland, and Spitsbergen. A ridiculous error has been propagated of this bird's being bred from a shell that is often sound sticking at the bottoms of ships: but it is now well known to be hatched from an egg in the ordinary manner, and to differ in very sew particulars from all the rest of its kind.

THE

### THE BRENT GOOSE.

THIS is smaller than the barnacle; its bill is black, and one inch and an half long. The head, neck, and upper-part of the breast are black; but about the middle of the neck, on each fide, is a spot of white: the lowerpart of the breaft, the scapulars, and the coverts of the wings are ash-coloured, clouded with a deeper shade; the tail, the quill-feathers, and the legs are black. These birds are common on our coasts in winter. In Ireland they are called barnacles, and appear in great numbers in August, leaving it in March. Their principal food is a kind of long grass growing in the water: they prefer the root and that part next above it, which they dive for, bite off, and leave the upper-part to drive on shore. Near London-Derry, Belfast, and Wexford, they are extremely numerous, and are taken in the night-time in nets placed across the rivers. They are much esteemed for their delicacy: Linnæus erroneously mentions the barnacle and the brent as fynonimous, and describes the true barnacle

nacle as the female of the white-fronted wild goofe; but Mr. Willoughby, Mr. Ray, and Mr. Briffon very properly describe them as different species.

### THE CANADA GOOSE.

THE shape of this bird is like that of our common tame goose, but a little longer; the back is of a brownish ash-colour, and the rump black: the lowest part of the tail is whitish, and the remaining feathers black: the lesser and covert feathers are of a brownish ash-colour, and the seet are black.

## THE BLUE-WINGED GOOSE OF NORTH-AMERICA.

THIS is smaller than the common tame goose, and has a red bill. The head, and greatest part of the neck is white. The back, the breast, and lower part of the neck, are of a dark known. The tail is of a brownish ask-colour, and the belly and thighs are white. The legs are base of seathers just above the knee, and the three forward toes are webbed. The legs and feet are red, and the toes are black, that

that which is backwards being very fmall. This is a native of Hudson's-Bay.

### THE MUSCOVY GOOSE.

THIS is a curious large fowl, and is three feet in length from the tip of the bill to the end of the tail; and, when the wings are extended, near five feet in breadth. It weighs about fourteen pounds: the bill is of an orange-colour, with a large tubercle or knob of the fame colour on the base of the upperjaw. The pupil of the eye is black, with a fine gold-coloured iris, and a large bag hangs beneath the bill. The top of the head and the fides of the neck are of a dark brown: the upperpart of the back is of the same colour, except that the outer edges of the feathers are of a lighter colour. The wings and the rest of the body are white, except a few dark feathers on the upper-part of the tail: the legs and feet are of a fine orange-colour, and the claws are black. This is the description of the male, which the fe-male greatly resembles, except that the knob is not so large. Thé

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The mountain goose of the Cape of Good Hope is larger than any of the European kind: the feathers on the top of the head and the wings are of a very beautiful shining green. It frequently comes into the valleys, where it feeds on grass and herbs.

The water-goose of the Cape of Good Hope is like the common goose with respect to colour, but has a brownish stripe, mixed with green on the back. The sless of both of these is

faid to be very good.

### THE TAME DUCK.

of our domestic animals. The very instincts of the young ones direct them to their favourite element; and, though they are hatched and conducted by the hen, they despise the admonitions of their leader. All birds have their manners rather from nature than education; and those of the duck kind, in particular, sollow their appetites, not their tutor, and attain their various persections without a guide. The arts of man indeed are the result of accumulated experience, those of inferior animals

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animals are in general felf-taught, and not acquired by imitation.

It is customary to lay duck-eggs un-der a hen, because she hatches them better than the parent would have done. The duck is a careless inattentive mother, frequently leaving her eggs till they spoil, and seeming almost to for-get that she is entrusted with the charge: she shews but very little more attention to the young, when they are produced: fhe leads them to the pond, and supposes she has sufficiently provided for her offspring when she has shewn them the water. The hen, on the contrary, is a most indefatigable nurse; she broods with the utmost assiduity, and usually brings forth a young one for every egg committed to her charge. She does not indeed lead them to the water, but she carefully guards them when they are there, by standing on the brink. She can afford them protection, if the weazel or the rat attempt to feize them: when weary of paddling, she conducts them to the house, and rears the suppositious brood, without sufpecting that they are not her own.

Of the tame duck there are not less

than ten different varieties, and Brisson

reckons

reckons upwards of twenty of the wild. The most obvious distinction, however, between wild and tame ducks is in the colour of their feet; those of the tame duck being black, and those of the wild duck yellow.

The common tame species of ducks take their origin from the mallard, and may be traced to it by unerring characters. The drakes, however they vary in colours, always retain the curled feathers of the tail; and both sexes the form of the bill of the wild kind.

Nature, for a wife and useful end, sports in the colours of all domestic animals, that mankind may the more readily distinguish and claim their re-

spective property.

The mallard is usually about twentythree inches in length, thirty-five
inches in breadth, and weighs about
two pounds and an half: the bill is
greenish inclining to yellow; and the
head and neck are of a deep shining
green. Almost a circle of white extends round the lower-part of the neck;
but the circle wants about a fourth of
being complete. The upper-part of
the breast is of a purplish red, and the
beginning of the back is of the same
colour:

marked with transverse speckled lines of a dusky hue. The scapulars are white; elegantly barred with brown. The spot on the wing is of a rich purple; and the tail consists of twenty-four scathers. The male of this species is distinguished by four middle seathers, which are black and strongly curled upwards; but the semales have not this mark. Their plumage is of a pale reddish brown, spotted with black; and their legs are of a saffron-colour.

thers, which are black and strongly curled upwards; but the females have not this mark. Their plumage is of a pale reddish brown, spotted with black; and their legs are of a fassron-colour.

"Ducks," says Mr. Mortimer, in his Husbandry\*, "require no charge in keeping, for they live on lost corn, snails, &c. for which reason they are very proper for gardens. Once in the year they lay a great number of eggs, especially a sort of duck which turns up its bill more than the common kinds. When they fit they require no attention. When they fit they require no attendance, except they have a little barley or offall-corn near them, that they may not straggle far from their nests to chill their eggs. They are reckoned to be better hatched under a hen than a duck; because while they are young, the hen will not lead them so often into the water. Some think it very proper

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to cut off the feathers from their rumps; because, when their tails are wet, it often occasions their drowning. As to the fattening of them, it may be done in three weeks time, by giving them any kind of corn or grain, and plenty of water. Ground malt, wet either with milk or water, is best."

### THE EIDER DUCK.

THIS useful species is found in the western isles of Scotland; but in great abundance in Norway, Iceland, and Greenland; from whence is imported a vast quantity of the down, known by the name of Eider, which is furn nished by these birds. Its remarkably light, elastic, and warm qualities, make it highly esteemed as a stuffing for coverlets, by such whom infirmities render unable to support the weight of common blankets:

This bird, which refides in the colder climates, as we have already observed, lays from fix to eight eggs, making her nest among the rocks or plants on the sea-shore. There is nothing very singular in the external materials of the nest; but the inside lining on which

the eggs are deposited, is the warmest, fostess, and lightest substance that can be imagined. This is no other than the down produced from the breast of the bird in the breeding-season, which the female plucks off with her bill, and furnishes her nest with a more va-Inable lining than the most skilful artists can produce. The natives are industrious in finding out the nest, and after fuffering the bird to lay, rob her of both the eggs and the neft. Not discouraged by the first disappointment, the duck builds and lays a fecond time in the fame nest. The second mansion, with its valuable furniture, is also taken away by the natives. She ventures, however, to build a third time, but the down for the lining of this nest is supplied from the breaft of the drake. If this is stolen from them, they both forfake the place and breed there no more. This down is feparated from the dust and moss by the natives; and, though they require a warm covering them-selves, their necessities oblige them to exchange it for brandy and tobacco, with the more indolent and luxurious inhabitants of the fouth.

The

### THE WILD DUCK.

THE difference between wild ducks, arises principally from their fize, and the nature of the place they feed in. Sea-ducks, which frequent the falt-water, and often dive, have a broad bill pointing upwards, a large hind-toe, and a long blunt tail. Pond-ducks have a straight and narrow bill, a small hind-toe, and a sharp-pointed train. Our decoy-men give the former the appellation of foreign ducks; the latter are supposed to be

natives of England.

All the varieties of wild ducks live in the manner of our domestic ducks, keeping together in flocks in the win-ter, and flying in pairs in fummer, rearing their young by the water-fide, and leading them to their food as foom as they escape the shell. They usually build their nests among heath or rushes, at no great distance from the water; and lay twelve, fourteen, or more eggs before they fit. But, though this is their general method, their dangerous fituation on the ground fometimes obliges them to change their manner of living; and their aukward nests are frequently seen exalted on the tops of This must be attended with great difficulty, as the bill of a duck is but ill-formed for building a nest, or furnishing it with such materials as to give it sufficient stability to stand the weather. The nest thus elevated generally confifts of long grass, mixed with heath, and lined with the bird's own feathers. But, in proportion as the climate is colder, the nest is more artificially made, and has a warmer lining. In the Artic regions, all the birds of this kind take incredible pains to protect their eggs from the severity of the weather. The gull and the pen-guin tribe seems to difregard the most intense cold in those regions, but the duck forms itself a hole to lay in, shel-ters the approach, lines it with a layer of grais and clay, another of moss within that, and then a warm coat of down or feathers.

As these birds possess the faculties of flying and swimming, they are principally birds of passage, and probably perform their journies across the ocean as well on the water as in the air.

Those which visit this country on the approach

approach of winter, are neither to tat nor to well-tafted as those that remain with us the whole year: their steff is often lean, and generally sishy. This slavour it has perhaps contracted in the journey; their food in the lakes of Lapland, from whence they descend, being generally of the insect kind.

being generally of the infect kind.

When they arrive among us, they fly about in flocks in fearch of a proper refidence for the winter. In the choice of this they have two objects in view; to be near their food, though remote from interruption. They prefer a lake in the neighbourhood of a marsh, where there is also a cover of woods, and where infects are the most plentiful. Lakes which have a marsh on one fide, and a wood on the other, generally abound with wild fowl.

Wild ducks, when flying in the air, are often lured down from their heights by the loud voice of the mallard from below: all the ftragglers attend to this call; and, in the course of ten or fifteen days, a lake that was quite naked before, becomes black with waterfowl; having deserted their Lapland retreats, to visit these ducks which reside continually among us.

They

They usually make choice of that part of the lake, where they are inaccessible to the approach of the fowler, in which they all appear huddled together, and are extremely loud and busy. Where they fit and cabal thus, there is no food for them, as they generally choose the middle of the lake, and what can employ them all the day it is not easy to conjecture. They frequently go off privately by night to feed in the adjacent meadows and ditches, which they are afraid to approach by day. In these nocturnal adventures they are often taken; for, though timorous, they are eafily deceived, and many of them are caught in springes. The greatest quantities, however, are taken in decoys, which are well known in the neighbourhood of London, though very little used in the remoter parts of the country.

The general season for catching fowl in decoys is from the latter end of October to the beginning of February. By an act of George the Second, a penalty of five shillings is incurred for every bird destroyed at any other season.

every bird destroyed at any other season.

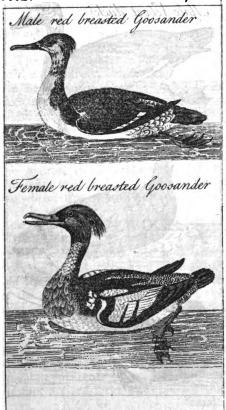
The decoys in Lincolnshire are usually let at a certain annual rent, from five

five pounds to thirty pounds a year. By these the markets of London are principally supplied with wild fowl. Upwards of thirty thousand of ducks, wigeon, and teal, have been sent up in one season, from ten decoys in the neighbourhood of Wainsleet.

#### THE GOOSANDER.

THE goofander frequents our rivers, and other fresh waters, especially in severe winters; they are excellent devers, and live on fish. The length of the male is about two feet four inches; the breadth three feet two inches, and the weight four pounds. The bill is three inches long, narrow, and finely toothed: the colour of that and the irides is red. The head is large, and the feathers on the hind-part long and loose: the colour black, beautifully glossed with green; the upper-part of the neck is the same: the lower-part, and the belly is of a fine pale yellow: the upper-part of the back, and the in-ner (capulars are black: the lower-part of the back, and the tail are ash-co-loured: the tail consists of eighteen feathers: the greater quill-feathers are black.





black, the lesser white, and some of them are edged with black: the coverts at the setting on of the wing are black, the rest white; and the legs are of a

deep orange-colour.

The female, which is fometimes called the dun-diver, is less than the male: the head, and the upper-part of the neck are of an iron-colour; the throat white: the feathers on the hind-part are long, and form a pendent creft: the back, the coverts of the wings, and the tail are of a deeper associour: the greater quill-feathers are black, the lesser white: the breast and belly are white, tinged with yellow.

#### THE VELVET DUCK.

THE male of this species is larger than the tame duck. The bill is broad and short, yellow on the sides, black in the middle, and the hook red: the head, and part of the neck is black, tinged with green: belind each ear is a white spot; and in each wing is a white seather; the rest of the plumage is of a sine black, and of the soft and delicate appearance of velvet: the legs and seet are red; the webs black: the

female is entirely of a deep browncolour, the marks behind each ear and on the wings excepted: the bill is like that of the male, except that it wants the protuberance at the base.

# THE SCOTER,

THE scoter weighs two pounds nine ounces: the length is twenty-two inches; and the breadth thirty-four inches: the middle of the bill is of a fine yellow, the rest is black; both male and female want the hook at the end; but on the base of the bill of the former is a large knob, divided by a fiffure in the middle. The tail confifs of fixteen sharp-pointed feathers, of which the middle are the longest. The colour of the whole plumage is black; that of the head and neck glossed over with purple; the legs are black. This bird is allowed in the Romiss church to be eaten in Lent. is a great diver, said to live almost constantly at sea; and to be taken in nets placed under water.

THE

#### THE TUFTED DUCK.

THIS bird does not weigh above two pounds; the length is about fifteen inches and a half; the bill is of a bluish grey, except the hook, which is black. The head is adorned with a short thick pendent crest. The belly and under coverts of the wings are of a pure white; the rest of the plumage is black, varied about the head with purple; the tail is short, consisting of fourteen feathers: the legs are of a bluish grey, and the webs black. The semale has no crest. When young she is of a deep brown, and the fides of the head next the bill of a pale yellow, but she preserves the other marks of the old duck.

#### THE SCAUP DUCK.

THIS is smallar than the common duck. The bill broad, flat, and of a greyish blue colour: the head and neck black glossed with green: the breast is black: the back, the coverts of the wings, and the scapulars, are finely marked with numerous narrow trans-

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werse bars of black and grey: the greater quill-feathers are dusky; the leffer white, tipt with black: the belly is white; the tail and feathers, both above and below are black; the thighs barred with dusky and white strokes: the legs dusky.

These birds differ infinitely in colours; so that in a flock of forty or

fifty there are not two alike,

# THE GOLDEN EYE.

THE length of this species is nine-teen inches; the breadth thirty-one inches, and the weight about two pounds. The bill is black, short, and broad at the base: the head, which is large, is of a deep black, glossed with green: at each corner of the mouth is a large white spot. The irides are of a bright yellow; the upper-part of the neck is of the same colour with that of the head: the breast and belly are white: the scapulars are black and white: the back, tail, and the coverts on the ridge of the wings are black; the fourteen first quill-feathers, and the four last are black; the seven middlemost are white, as are the coverts immediately

above them; the legs are of an oranger colour. The head of the female is of a deep brown, tinged with red; the neck grey; the breast and belly are white; the coverts and scapulars dusky and ash-coloured; the middle quill-feathers white; the others, together with the tail, are black; the legs dusky. These birds frequent fresh water, as well as the sea; and are found during winter on the Shropshire meres.

## THE SHIELDRAKE,

THE length of the male of this elegant species is two seet; the breadth three feet and a half; and the weight two pounds ten ounces. The bill is of a bright red, swelling at the base into a knob, which is most conspicuous in the Spring; the head and upperpart of the neck is of a fine blackish green; the lower-part of the neck is white; the breast, and the upper-part of the back is surrounded with a broad band of bright orange-bay; the coverts of the wings, and the middle of the back are white; the nearest scapulars black, the others white; the greater quill-feathers are black; the exterior webs

webs of the next are a fine green, and those of the three succeeding orange; the coverts of the tail are white; the tail itself of the same colour, and except the two outermost feathers tipt with black; the belly is white, divided lengthways by a black line; the legs of

a pale flesh colour.

These birds frequent the sea-coasts, and breed in rabbit-holes. If any one attempts to take their young, the old birds shew great address in diverting his attention from the brood; they sly along the ground as if they were wounded, until the young are got into a place of security, and then return and collect them together. The shieldrake lays fosteen or faxteen eggs, which are white, and of a rounded shape. In winter they assemble in great slocks. Their sless is very rank and disagreeable.

## THE PINTAIL DUCK.

THIS bird is of a flender form, and has a long neck: its length is twenty-eight inches; its breadth about three feet two inches; and its weight twenty-four ounces. The bill is black in the middle,

middle, and blue on the fides; the head is of an iron-colour, tinged behind the ears with purple, a white line extends from the ears a confiderable way down the neck; this line is bounded by black : the hind-part of the neck, the back, and fides are elegantly marked with white and dusky waved lines: the fore-part of the neck, and belly are white; the scapulars ftriped with black and white; the coverts of the wings are ash-coloured; the lowesttipt with dull orange: the middle quill-feathers barred on their outmost webs with green, black and white: the exterior feathers of the tail are ashcoloured; the two middle black, and three inches longer than the others; the feet are of a lead-colour. The female is of a light brown colour, spotted with black. These birds are found in great abundance in Connaught, in Ireland, in the month of February only: they are much effeemed for their delicach.

#### THE POCHARD.

THE length of this bird is about nineteen inches; its breadth two feet and

and an half; and its weight twentyeight ounces. The bill is of a deep lead-colour; the head and neck are of a bright bay-colour; the breaft, and part of the back where it joins the neck are black; the coverts of the wings, the feapulars, back, and fides under the wings are of a pale grey, elegantly marked with narrow lines of black: the quill-feathers dusky; the belly is ashcoloured and brown; the tail, which confists of twelve short feathers, is of a deep grey-colour; the legs lead-coloured: the irides of a bright yellow, tinged with red. The head of the female is of a pale reddifh-brown; the breast is rather of a deeper colour; the coverts of the wings a pale afh-colour; the belly afh-coloured. These birds frequent both fresh and falt water; and are very delicate eating. They are known in the London markets by the name of Dun birds.

#### THE GREY-HEADED DUCK.

WE are indebted to Mr. Bolton for an account of this bird, which he suspects to be the Glaucion of authors. It agrees in all respects with Belon's description of that bird, the head and neck excepted, which in that of the French ornithologist are of a reddish brown.

It is the fize of a common duck; the bill large, broad, and ferrated round the edges, and of a yellowish brown comlour; the head large and round; the irides of the colour of gold; the head and upper-part of the neck are of a deep grey; at the extremity of the grey passes a colour of white half an inch broad, surrounding the neck. The breast is of a silvery-grey; the belly quite white; the back and wings black; the latter, when expanded, shew a few white feathers; the tail is short and black; the legs are of a yellowish brown-colour; the hind-toe small.

## THE WIGEON.

THE length of the wigeon is twenty inches; the breadth two feet three inches; and the weight about twenty-three ounces. The bill is lead-co-loured, and black at the end; the head, and upper-part of the neck is of a bright light bay; the forehead fome-what paler, and in some almost white;

the plumage of the back and fides are elegantly marked with narrow, black, and white undulated lines; the breaft is of a purplish hue, and is sometimes marked with round black spots; the belly is white. In some the coverts of the wings are almost wholly white; in others of a pale brown, edged with white; the greater quill-feathers are dusky; the outmost webs of the middle-feathers are of a fine green, with black tips. The two middle-feathers of the tail, which are longer than the others, are black and sharp-pointed; the rest are ash-coloured: the legs dusky. The head of the female is of a rusty-brown, spotted with black; the back is of a deep brown edged with a paler; and the belly white.

#### THE GADWALL.

THE gadwall is rather smaller than the wigeon. The bill, which is two inches long, is black, and flat; the head, and the upper-part of the neck, are of a reddish brown, spotted with black; the lower-part, the breast, the upper-part of the back, and the scapulars, are beautifully marked with black.

and white lines; the belly is of a dirty white; the rump above and below is black; the tail ash coloured, edged with white; the coverts on the ridge of the wing are of a pale reddish brown; the greater quill-feathers are dusky; the inner-web of three of the lesser quill-feathers is white; which forms a conspicuous spot; the legs are orange-coloured. The breast of the semale is of a reddish brown, spotted with black; and the back of the same colour; the wings, though they have the same marks, are not so bright as those of the male.

#### THE GARGANEY.

THIS bird is of a fize between the wigeon and the teal. The bill is of a deep lead-colour; the crown of the head is dusky, marked with oblong streaks; on the chin is a large black spot; from the corner of each eye is a long white line, pointing to the back of the neck: the cheeks, and upper-part of the neck, are of a pale purple, marked with minute oblong lines of white, pointing downwards; the breast is of a light brown, marked with semi-circular bars of black: the belly is Vol. VIII. H white;

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white; the coverts of the wings are grey; but the lowest are tipt with white; the first quill-feathers are ash-coloured; the exterior webs of those in the middle are green; the scapulars are long and narrow, and elegantly striped with white, ash-colour, and black; the tail is dusky; and the legs of a lead colour. The semale has an obscure white mark over the eye; the rest of the plumage is of a brownish ash-colour.

#### THE TEAL.

THE teal weighs about twelve ounces; the length of the teal is about fifteen inches, and the breadth twenty-eight inches. The bill is black: the head, and the upper part of the neck are of a deep bay; from the bill to the hind-part of the head extends a broad bar of gloffy changeable green, bounded on the lower-fide by a narrow white line; the lower-part of the neck, the beginning of the back, and the fides under the wings, are elegantly marked with waved lines of black and white; the breaft and belly are of a dirty white; the tail is sharp-pointed,

and dusky; the coverts of the wings are brown; the greater quill-feathers are dusky; the exterior webs of the lesser are marked with a glossy green spot, above that another of black, and the tips white; the irides are whitish; and the legs dusky. The semale is of a brownish ash-colour, spotted with black; and, like the male, has a green

fpot on the wings.

The summer teal, it is imagined, differs not in the species from the common kind, only in sex. Linnæus hath placed it among the birds of his country; but does not mention its place of residence, and hath evidently copied Mr. Willoughby's imperfect description of it: and to confirm our opinion of its being the same species, a bird which was sent us from the Baltic-sea, under the title of anas circia, the summer teal of Linnæus, was no other than the semale of our teal.

# THE WHITE-BELLIED DUCK OF JAMAICA.

THIS bird is about twenty inches long, and the breadth is thirty inches. The bill is black, near two inches long,

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and the holes of the nostrils are round. The tail is three inches long, and the feathers on the head are mottled with light and dark brown. The upperpart of the neck, the sides under the wings, and part of the belly, are covered with brown feathers crossed with whitish lines. The back is more brown, and the tail and wings are of a light brown; but some of the shorter prime feathers are painted with green, orange, and white. The breast and part of the belly is white, and the legs and feet are of a greenish brown.

#### THE BARBARY DUCK.

THE Barbary duck is of the fize between a goofe and a duck, but the legs are short, and the male is larger than the female. The colour is not always the same; some being white, others black, and others of different colours; but it is generally black, variegated with other colours. The bill of this bird is short, broad, and crooked at the end; and it has a crest or red tubercle between the eyes as large as a cherry, and a red skin about the eyes, which has the appearance of red leather. The

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flesh has, a taste between a goose and a duck.

#### THE MADAGASCAR DUCK.

THIS bird is larger than the tame duck, its bill is of a yellowish brown, and the iris of the eyes of a fine red. The neck and head are of a dusky green, and the back of a deep purple mixed with blue; the edges of the feathers are red, and the breast of a deep brown, with the edges of the outer-feathers red; but the feathers on the shoulders are green, some of which have red edges. The first row of the covert feathers is of the same colour, and the second is green. The long feathers of the wings have red edges, and the legs and feet are of an orange-colour.

# THE COOT-FOOTED TRINGA.

THE bill is black, slender, and terminates in a point. The upper-chap is longer than the lower, and bent a little downwards. A blackish line runs from the nostril through the eye; but the under side of the head and throat H 3 is

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is white. An orange-coloured line runs behind each eye, and down each fide of the neck, joining on the fore-part to the middle of the neck beneath the white throat. On the top of the head, the hind-part of the neck, all round the lower-part of the neck, back, and coverts of the wings, the feathers are of an ash-colour; but the greater quills are black, and the middle are black with white tips; the other parts of the back are of a dusky brown. Between the back and the wings, there are a few long feathers edged with orange, and the rump is dufky and white mixed with transverse lines. The tail is dusky, and the breast, belly, and thighs are white. The legs are bare above the knees, and the legs, feet, and claws, are of a lead colour.

#### THE BAHAMA DUCK.

THIS bird is smaller than a tame duck; the head near the upper-jaw is of a triangular shape, and of a gold colour. The inside of the bill, and the lower-part of the neck are white; the hind-part of the head, the breast and belly are of a yellowish ash-colour,

and the wings brown; but the middle is green furrounded with yellow, and the extremities are black.

# THE FRENCH TEAL.

THIS is much smaller than a duck; it appears only in the autumn and the winter: they are all of the same colour, only the females are grey about the neck, and yellowish under the belly: the colour is brown on the back, upon the wings, and under the rump. Like ducks they have a shining spot upon each wing, and a white line underneath, which proceeds from the extremity of the wings; the twelve prime feathers are of the same colour; but the next following are white at the extremities, and make another white line; the other feathers are black above, forming a black spot on each side.

#### THE INDIAN TEAL.

THE Indian teal is smaller than a duck, and the upper-part of the bill is longer than the lower. The bill and feet are of a beautiful red; the top of the head, the upper-part of the neck, and

and almost the whole of the back, are yellow; as well as the rump, which is spotted with large spots in the shape of an half-moon. The under part of the neck, the breast, and the belly are white; but the wings have a great variety of colours, in which the beauty of this bird principally consists; for the first feathers on the shoulders are of a faint rose-colour, marked with black spots in the shape of a half-moon; those that sollow them are partly white and partly green; and the longest are all adorned with a beautiful shining blue. The tail is a mixture of green and blue, and the toes are destitute of membranes.

#### THE CHINESE TEAL.

THE Chinese teal has a green tust, and the seathers are of a purple colour. It is beautifully variegated, and the seathers near the rump are placed in a very singular manner.

#### THE FULMAR.

THIS is generally an inhabitant of the isle of St. Kilda, where it makes its appearance

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# little Petrel



# Fulmar



appearance in November, and continues the whole year, except September and October; it lays a large white egg; and the young are hatched about the middle of June. This bird is of great use to the islanders; it supplies them with oil for their lamps, down for their beds, a delicacy for their tables, a balsam for their wounds, and a medicine for their diseases. It is also a certain prognosticator of the change of the wind; if it comes to land, no west wind is expected for some time; and the contrary when it returns and keeps at sea.

The fulmar, like all the petrels, has a peculiar faculty of spouting from its bill, to a considerable distance, a large quantity of pure oil; which it does by way of defence, into the face of any one that attempts to take it: so that they are, for the sake of this panacea, seized by surprise; and this oil is subservient to the above-mentioned medical uses. Martin informs us that it has been used with success in London and Edinburgh in rheumatic cases. In the General Advertiser, June, 1761, is the following remarkable account from the isse of Mull. "A gentleman of the

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and coverts of the wings and tail are black, edged with an olive-brown; the base of the wing is white; the throat, breast, and belly, are ash-coloured; the sides under the wings are finely varied with black and white bars. The tail, which is very short, consists of twelve black feathers; and the ends of the two middle ones are tipt with rust-colour. The legs are of a dusky slesh-colour, placed far behind. The toes are very long.

## THE KING-FISHER.

THE king-fisher seems to unite in itself somewhat of every class preceding. It has appetites for prey like the rapacious kinds, and an attachment to water like the birds of that element. It possesses the beautiful plumage of the peacock, the delicate shadings of the humming bird, the short legs of the swallow, and the bill of the crane.

This bird is somewhat larger than the swallow, and its shape is clumfy: the legs are very small, and the bill disproportionably long, being two inches from the base to the tip: the upperchap is black, and the lower-chap yel-

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fow. The inelegant form of this bird is fully at oned for by the beauty of its colours. The top of the head, and the coverts of the wings are of a deep blackish green, spotted with bright azure; the back and tail are of the most resplendent azure: the belly is orange-coloured, and a broad mark of the same colour extends from the bill to beyond the eyes, near which there is a large white spot. The tail, which is short, consists of twelve feathers of a rich deep blue, and the feet are of a reddish yellow.

This is one of the most rapacious little animals that skims the deep: it is continually in action, and feeds on fish, which it takes in surprizing quantities, considering its clumsy form and diminutive size. It chiefly frequents the banks of rivers, and, like the osprey, takes its prey by balancing itself at a certain distance above the water for a considerable space, and then, darting into the deep, seizes the sish with inevitable certainty. In a bright day, the plumage exhibits a beautiful variety of brilliant colours, while the bird remains suspended in the air. This extraordinary beauty has probably given

rise to sable, for fancy is always willing to encrease the wonder, wherever

there is any thing uncommon.

This species is the mute baleyon of Aristotle \*, which he describes with unusual precision. After describing the bird, he gives a description of the nest, which appears as fabulous and extravagant as any of the stories which the most inventive of the ancients have delivered. He says it appeared like those concretions that are formed by the seawater; that it refembled the long-necked gourd, was hollow within, with a very narrow entrance, and that if it overset, the water could not enter; that it refisted any violence from iron, but could be broke with a blow of the hand; and that it was composed of the bones of the sea-needle.

Part of this description, however, appears to be founded on truth. With regard to the form of the nest, his account exactly agrees with that which count Zinanni has favoured us with. Nor are the materials which Aristotle says it was composed of entirely of his own invention: any one who has seen

<sup>\*</sup> Hist. An. 892. 1050.

the nest of the king-fisher, must have observed that it was strewed with the bones and scales of fish; the fragments of the food of the owner and its young: and those who will not admit it to be a bird that frequents the sea, must not confine their ideas to our northern shores; but consider that those birds which inhabit a sheltered place in the more rigorous latitudes, may endure exposed ones in a milder climate. Ariflotle's observations were made in the East; and he admits that the balcyon fometimes ascended rivers. It is probable that this was in order to breed: for Zinanni informs us, that in his foft climate, Italy, it breeds in May, in the banks of streams that are near the sea; and, after the first hatch is reared, returns to lay a second time in the fame place.

As this bird has been faid to build her nest upon the sea, that she might not be interrupted in this task, she has been said to be possessed of a charm to allay the sury of the waves; and the poets, indulging the powers of imagination, have dressed the story in all the robes of romance. The following is Mr. Fawkes's translation of what

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Theo-

Theocritus has faid upon the sub-

May balcyons smooth the waves, and calm the seas; And the rough south-east sick into a breeze; Halcyons, of all the birds that haunt the main, Most lov'd and honour'd by the Nereid train.

Both Aristotle and Pliny inform us that this bird is most common in the seas of Sicily: that it sits only a few days, and those in the depth of winter; and that, during that period, the mariner may sail in full security: they were therefore stiled balcyon days; and, in after times, those words expressed

any season of prosperity.

The ancient poets are full of, fables relative to this bird, nor are their historians exempt from them. Cicero has written a long poem in praise of the halcyon, of which only two lines are now remaining. These fables have even been adopted by St. Ambrose, one of the earliest fathers of the church. Behold," says he, "the little bird which in the midst of the winter lays her eggs on the sand by the shore. From that moment the winds are hush.

<sup>\*</sup> Theocrit. Idyl. vil. 1. 57.

ed; the sea becomes smooth; and the calm continues for sourteen days. This is the time she requires; seven days to hatch, and seven days to foster her young. Their Creator has taught these little animals to make their nest in the midst of the most stormy season, only to manifest his kindness by granting them a lasting calm. The seamen are not ignorant of this blessing; they call this interval of fair weather their halcon days; and they are particularly careful to seize the opportunity, as they need fear no interruption."

Innumerable instances might be produced of the credulity of mankind with respect to this bird; but the king-fisher, with which we are now acquainted, has none of those powers of allaying the storm, or building upon the waves: it is contented to make its nest on the banks of rivers, in such situations as not to be affected by the rising of the stream. When it has sixed upon a proper place, it makes with its bill a hole about a yard deep: sometimes it finds the deserted hole of a rat, or one caused by the root of a tree decaying, of which it takes quiet possession. It enlarges the hole towards the bottom,

lines, it with the down of the willow, and, without any farther preparation,

deposits its eggs there.

The neft of the king-fisher is very different from that described by the ancients, by whom it is said to be made in the shape of a long-necked gourd of the bones of the sea-needle. Plenty of bones and the scales of sishes are indeed found there; but these are only the remains of the bird's food, and not brought there either for the purposes of warmth or convenience. The king-sisher, as Bellonius observes, feeds upon sish, yet cannot digest their bones or scales, but throws them up again as eagles and owls are seen to do a part of their prey.

In these holes the female king-fisher is often found with from five eggs to nine; and if the nest be robbed, she will again return and lay there. "I have had," says Reaumur, "one of those females brought me, which was taken from her nest about three leagues from my house. After admiring the beauty of her colours, I let her fly again, when the fond creature was instantly seen, to return back to the nest where she had just before been made a

captive.

captive. There, joining the male, she again began to lay, though it was for the third time, and though the season was very far advanced. At each time she had seven eggs. The older the meeting is, the greater quantity of sishbones and scales does it contain: these are disposed without any order; and sometimes take up a good deal of room."

The king-fisher begins to lay early in the season, and produces her first brood about the beginning of April: the sidelity of the male exceeds even that of the turtle; and while the semale is thus employed, he supplies her with large quantities of sish. At that season the hen, contrary to most other birds, is sound plump and in good condition.

The modern vulgar have their fables concerning this bird as well as the ancients. It is an opinion generally received among them that the flesh of the king-fisher will not corrupt; and that vermin will not approach it. With equal foundation it is faid, that when this bird is hung up dead, its breast is always pointing to the north. It is certain, however, that the flesh of this bird

bird is utterly unfit to be eaten, though its beautiful plumage preserves its lustre longer than that of any other bird we know.

#### THE AMERICAN KING-FISHER.

WITH regard to the general form, this bird resembles the European king-fisher, as well as in the bill and feet; but its tail is longer in proportion.
The bill is strong and blackish, except towards the base, where it is of a reddish flesh-colour. The head is of a lead-colour, inclining to blue; on the top of which there is a kind of creft formed of long loose pointed feathers. On each side of the head are two white spots; and the throat and under side of the neck are white. The breast is of a lead-colour. Six or seven of the prime quills are blackish, with small white spots on the outer-webs, which altogether form transverse lines of white. The rest of the quills have white tips, and the inner covert feathers of the wings are white, with a little mixture of orange-colour. The tail is of a pale lead-colour, the feathers of which are tipt and transversely marked

marked with narrow bars of white. The belly, the thighs, and the covert-feathers under the tail are white: the legs and feet are of a reddish-brown, and the claws dusky.

# THE LITTLE GREEN AND ORANGE-COLOURED KING-FISHER.

THE length of this bird is about five inches from the tip of the bill to the end of the tail, which is longer in proportion than the common kingfisher. The bill is of a dusky colour, except that the lower-chap is reddish towards the base. The throat is of an orange-colour, and a mark of the same colour runs on each fide from the base of the bill over the eyes. The head, the hind-part of the neck, the back, the tail, and covert-feathers of the wings are of a fine green; and a bar of the same colour runs across the breast; but the fides of the belly are of a bright reddish orange-colour. The lower part of the belly, the thighs, and the covert-feathers under the tail are white. The tail confifts of twelve feathers, the two middle ones being a little

little longer than the rest; and the inner webs are all spotted with white. The inner coverts and ridges of the wings are of a light orange, and the quills are dusky, spotted with a light clay-colour on the outer and inner-webs, except a few of the outer quills. The legs and feet are small; and the toes, which are of a slessh-colour, are connected like those of all other king-sishers.

#### THE KING-FISHER OF CATESBY.

THIS is about the fize of a thrush, and is the largest of all those with short tails. The head is large in proportion, and full of feathers, forming an irregular tust, and of a blue colour. It has a white line under the eyes, and a white spot on the forehead. The breast is white, variegated with streaks of red and blue. The quill-feathers of the wings are black, tipt with white. The lower-part of the belly is white, and the tail blue. It has three toes before, and one behind.

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## THE SMYRNA KING-FISHER.

THIS bird, which is three times as large as the common king-fisher, has a very long bill of a red colour, thick at the base, and sharp at the point. The iris of the eyes is white; the top of the head, the neck, the lower-part of the belly, and the thighs are brown. A broad white stripe runs across the breast into the scapular feathers of the wings. The back, wings, and tail, are of a fine deep green; and the legs and feet are of a beautiful red.

# THE KING-FISHER OF THE RIVER GAMBIA.

THIS bird is almost as large as a thrush, it has a long tail, and its wings are of a sea-green colour. The covert feathers are purple and blue, and the large feathers of the wings are of a dusky brown. The bill is red.

#### THE KING-FISHER OF BENGAL.

THIS is but little inferior to the thrush in fize, and its bill is three inches long,

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long, of a fine scarlet colour, thick at the base, and sharp at the end. The iris of the eyes is of a fine yellow: the head, the upper-part of the neck, and the back are brown: the breast, the throat, and part of the belly are white, having five large brown spots on each side. The lower-part of the back, the wings, and the tail are of a fine bluish green, except the covert feathers of the wings, which are brown. The legs and toes are of an orange-colour, and very short.

The king-fisher of Surinam is principally diffinguished by its forky fail, of which two feathers are longer than the

reft.

## THE SMALL KING-FISHER OF BENGAL.

THIS is about the fize of the common king-fisher, and has a fine scarlet bill, pretty thick at the base. It has a yellow spot on the forehead, and a white spot under the throat. A broad black line runs from the bill quite round the eyes. It has a tust on the head of a dirty reddish colour, and beneath is a dark blue line, separated from

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from the back by a broad white stripe. The back and wings are of a dark blue, and the upper-part of the tail is red; but the belly, thighs, and the lower-part of the tail are of a beautiful yellow. The legs and feet are reddift.

## THE QUURBATOS, OR FISHER.

THIS bird is not larger than a spar-row, and its plumage is finely varie-gated. The bill, which is as long as the whole body, is very strong and sharp, and on the inside is armed with small teeth, resembling those of a saw. These birds skim with great rapidity in the air and on the furface of the water; and they are so numerous on each side of the river Senegal, that they sometimes amount to feveral millions. Their nefts are composed of earth, mixed with moss and feathers, and are of such curious workmanship that they are proof against the rains. We are informed by Le Maire that these nests are made on palm-trees, and at the extremity of the most slender branches; where they hang by a reed or straw of about gighteen inches long, and the bottoms hang like balls in the air.

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#### THE BEE-EATER.

THE form of this bird is like that of the king-fisher, and the fize exceeds that of a black-bird. The bill resembles that of a king-fisher, except that it bends a little more downwards. The feet also are exactly like those of the king-fisher. The tongue is slender, rough towards the end, and jagged as if it had been torn. Some have eyes of a hazel colour, and others of a beautiful red. The head is large in proportion to the body, and the feathers at the base of the upper-chap are white, shaded with green and yellow. In some the back-part of the head is of a deep red, and in others there is a mixture of green and red. A streak of black passes from the corners of the bill along each fide of the head, and extends beyond the eyes. On the up-per part of the head the feathers are of a pale yellow: the belly, neck, and breast are of a bluish green, and in some the feathers of the shoulders are blue on the under-fide, and in others green, with a mixture of red. The large green feathers are of an orangecolour. Digitized by Google

eolour, with black tips, intermixed with fome that are green. The tail, which is about three inches long, confifts of twelve feathers; of which, two in the middle are confiderably longer than the rest, and end in sharp points. The colour of the tail is blue in some, and green in others.

#### THE BEE-EATER OF BENGAL.

THIS is about the fize of a blackbird. The bill is black, thick at the base, bending downward, and near two inches in length. The eyes are of a beautiful red; and on each fide of the head a black streak extends from the corners of the bill to beyond the eyes; and near it, on the under-part of the head, the feathers are of a pale yellow. The feathers on the belly, neck, and breast, are of a bluish green, and those on the shoulders in some are blue on the underfide, and in others a mixture of red and green. The large wing feathers are approaching to an orange-colour, with black and green tips intermixed. The tail, which is upwards of three inches long, confifts of twelve feathers, the two middlemost K 2

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most of which are considerably longer than the rest. The colour of the tail is blue in some, and green in others.

# OF THE EMIGRATION OF WATER-FOWL.

OF the vast variety of water-fowl that frequent this island, it is assonishing to reslect how sew are known to breed here: the desire of a secure retreat urges them to leave this country more than the want of food. The bulk of those birds are too timid and shy for so populous a place; but those that breed in the almost inaccessible rocks that impend over the British seas, still continue to build and lay there in vast numbers, having little to sear from the approach of mankind.

#### The Heron.

The crefted heron and the white heron only visit us at uncertain seafons; but the common heron and the bittern never leave us.

#### The Curlew.

The curlew fometimes breeds on our mountains, but the greater part retire to other countries.

#### The Woodcock.

Woodcocks breed in the moist woods of Sweden, and other cold countries.

## The Snipe.

Snipes breed here fometimes, but the greatest part of them, and every other species of this genus, retire elsewhere.

## The Lapwing.

The lapwing continues the whole winter in this island; the ruff breeds here, but retires in winter. The red-shank and sand-piper breed and reside here.

#### The Plover.

The green plover, the long-legged plover, and the fanderling visit us only in K 3 winter.

## Of WATER-FOWL.

winter. The dottrel appears in Spring and Autumn, but does not breed here. The fea-lark and the Norfolk plover breed in England.

## The Water-Rail.

The water-rail, the water-hen, and every species of these two genera, continue with us the whole year.

#### The Coot.

The coot is a constant inhabitant of Great-Britain.

#### The Grebe.

The great crefted grebe, the black and white grebe, and the little grebe, breed in this island, and never migrate; the others breed in Lapland, and only visit us occasionally.

## The Avosetta.

The avosetta breeds in Jutland, and only visits our shores in the winter time.

## The Penguin.

The penguin or great auk fometimes breeds in St. Kilda. During Summer, the auk, the guillemot, and puffin inhabit our maritime cliffs in great numbers. The black guillemot breeds in St. Kilda, in the Bass isle, and in Llandidno rocks.

#### The Diver.

The divers breed chiefly in the lakes of Sweden and Lapland.

#### The Gull.

Every species of the gull breeds in the British isles, except the skina and black toed gull, which inhabit the Ferroe isles, Norway, and Iceland, and only visit our country occasionally.

#### The Fulmar.

The fulmar breeds in the isle of St. Kilda, where it continues the whole year, except September and part of October.

The

#### The Duck.

Of the numerous species of the duck kind, we know of no more than five that breed here, viz. the tame swan, and tame goose, the shield-duck, the eider duck, and a very small portion of the wild ducks. The rest contribute to form that amazing multitude of waterfowl that annually visit the woods and lakes of Lapland, Norway, Sweden, &c.

#### The Cormorant.

The cormorant and shag breed on our high rocks, and remain on our shores the whole year. The gennet breeds in some of the Scotch isles, and visits our seas in pursuit of the herring and pilchard.

# OF THE MIGRATION OF OTHER BRITISH BIRDS.

IT is to be lamented that none, except two northern naturalists, Mr. Klein and Mr. Eckmarck, have professedly

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fessedly treated on the migration of birds. We cannot, however, omit our acknowledgments to two eminent pens who have treated this subject as far as it related to rural economy; and in such a manner as to do honour to their respective countries: Mr. Alex. Mal. Berger, and Mr. Stilling-fleet are the gentlemen we mean.

We wish we could induce others of our countrymen to follow their example: the matter can never be exhausted, as every country will furnish new obfervations; each of which, when compared, will serve to strengthen and

confirm the other.

## Of the Hawk,

All the ignoble species of this genus breed in Great-Britain: of the falcons, we only know that which is called the peregrine, which annually builds its nest in the rocks of Llandidno, Caernarvonshire.

## Of the Owl.

Every species breeds in this country, except the short-eared owl, and the little

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little owl, and it is not certainly known that those do not. Hawks and owls being birds of prey, have the means of living here at all times, and therefore are not obliged to change their place of abode.

#### The Butcher-Bird.

The red-backed butcher-bird breeds, with us; but it is probable the others migrate, as we have not heard of them.

#### The Crow.

The Royston crow migrates regularly with the woodcock. It breeds in Sweden and Austria; but it appears very extraordinary that a bird should leave us, whose food is such that it may be found at all seasons in this country.

## The Woodpecker.

Woodpeckers continue with us the whole year, their food being to be obtained at all times in the bark of trees.

The

## The Wryneck.

THIS bird disappears before winter, and revisits us in the Spring, a little earlier than the cuckoo. If it feeds only on ants, as several have afferted, the cause of its migration is very evident.

#### The Cuckoe.

This bird disappears early in Autumn; its retreat is entirely unknown to us.

#### The Nuthatch.

This bird continues in Great-Britain the whole year.

## · The Chough.

As the diet of this bird is corn and infects, it is a conftant inhabitant of Great-Britain.

The

#### The Grous.

The whole of this tribe, except the quail, continues here the year round. The quail either leaves us entirely, or retires towards the sea-coasts.

## The Bustard.

This continues with us all the year, and inhabits our downs and their vicinities.

## The Ring-Dove.

Many of these birds breed here; but the multitude that appears in the winter, is so disproportioned to what continue here the whole year, as to be a convincing proof that the greatest part quit the country in the Spring. Perhaps they go to Sweden to breed, and return from thence in Autumn. Mr. Ekmark says they entirely quit that country before winter. The turtle either leaves us in the winter, or changes its place, and retires to the southern counties.

## The Thrush kind,

The red-wing and the fieldfare breed in Norway and other cold countries, where they pass their summers: they feed upon berries, which are found in great plenty in these kingdoms, and tempt them to visit us in the winter. The fieldfare, red-wing, and the Royston crow, are the only land-birds that constantly and regularly migrate into this island, and do not breed here.

#### The Stare,

The stare breeds in this island; though it is probable that many of them remove to other countries for that purpose; for the produce of those that continue here, seems unequal to the vast multitudes of them that appear in winter. Possibly many of them migrate into Sweden.

#### The Swallow.

At the approach of winter every species disappears.

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L

The

## Slender-billed small Birds.

Though all these seed on worms and insects, yet only part of them leave these kingdoms. The nightingale, the black-cap, the fly-catcher, the willow-wren, the wheat-ear, the whinchat, the white-throat, and the stone-chatter, leave us before winter; while the small and delicate golden-crested wren braves our severest frosts. It is probable that Spain, or the south of France, is their winter asylum; as they are incapable of very distant slights.

## The Grosbeak and Crossbill.

These birds breed in Austria, and /

## The Finches.

All finches feed on the feed of plants, and all continue in fome parts of these kingdoms, except the siskin, which is said to come from Russia, and is only an irregular visitant. The linnets shift their quarters, breeding in one part

## Of BRITISH BIRDS.

nr

this island, and remove with their young to others.

## Buntings.

All the genus inhabit this island throughout the year, except the greater brambling, which, in very severe seafons, is forced here from the north.

## Tit-Mice.

They feed on infects, and continue the whole year in this country.

## GLOSSARY,

Explaining some rechnical Terms used by natural Historians.

ANNULATED: marked with rings.

Caruncula: a flethy excrescence, like a wen. Lin. Syst. p. 7 175, 02.

Cinereous: the colour of wood-ashes.

Coma: a bush of hair on the head; fometimes at the tip of the ear.

Lyn. Syft. p. 36, &c.

Compedes: fetters or shackles: applied to whales and amphibious animals, which instead of feet, properly so called, have a kind of finny tail.

Lin. lyst. p. 25, 49, 56

Concolor : of the fame colour with the

body : spoken of the tail.

L 3 Crested:

Crested: wearing a tust or plume on the head: see n. 126.—Applied by Linnæus, p. 55. to the skin on the forehead of the sea-lion: and p. 73, and 75. to hairs on the nostrils.

Digitated: a fubdivision of the class Mammalia, comprehending those which have the feet divided into toes, furnished usually with claws.

Fasigiate: sharp at the end like a pyramid: spoken of a beard. Lin. syst.

p. 38.

Ferruginous: the colour of rusty iron.

Floccose: tusted: spoken of the tail,
which in some animals is terminated by a tust of hairs. Lin.

syft. p. 36, 60, B5.

Height: the measure from the base whereon the animal stands, to the top of the shoulders; taken by a line perpendicular to the horizon.—In apes which go erect, the height is measured from the ground to the top of the head.

Helvolus: pale red or tawny. Lin. Syst.

p. 60.

Incumbent: lying one over the other. .

Jubate :

Jubate: cloathed with long hairs like a horse's mane: spoken of the tail or breast. Lin. sys. p. 52, 60, 98, 99.

Length: the measure from the tip of the nose to the origin of the tail.

Mammalia: animals which have paps, and fuckle their young. The name of the first class of animals in the System of Linnæus; comprehending, besides some others, all those which we usually call Beasts or Quadrupeds.

Muticus: spoken of a toe which has no claw. Lin. syst. p. 72, &c.

Myfaces: whiskers: stiff hairs about the mouth; sometimes on other parts. Lin. syst. p. 58, 63, 66, 74, 81, 84, 87, 88.

Nistitating membrane: a skin that covers the eye, or may be withdrawn at the pleasure of the animal. Lin.

fyft. p. 56, 69.

Ocelli: finall fpots, with a ring of the fame colour furrounding them at fome distance. Lin. fift. 1.61.

Palmæ: the fore-feet. Lin. syst. p. 76, 79, &c.

Palmated :

#### 116 GLOSSARY.

Palmated: when spoken of horns, means that they are divided like a hand with the singers spread: when spoken of seet, it means that they are webbed, or have the toes connected by a membrane, like those of water-soul. Lin. syl. p. 46, 66.—See Gen. 39, 40.

Planta: the hind-feet. Lin. Jyl. p. 76,

79, 86.

Prehenfile: fpoken of a tail, which in some animals is so long and pliant, as to perform the office of a hand, in taking hold. Lin. fift. p. 37, &c. — Applied also to the probole is or trunk of an elephant.

Primates: chiefs of the creation: the name of the first order of Mammalia in Linnæus's System.—The names of Linnæus's orders are preserved; because it was difficult either to translate them, or to substitute better in their room.

Retractile: a term applied to the claws of the cat kind; because they lie in sheaths, to be exerted at pleafure.

Subulated: long, marrow, bent, pointed; fhaped like a cobler's awl: fpoken of claws.

Teetb :

Teeth: are of three forts. 1. Primores, cutting or fore-teeth. 2. Laniarii. canine or eye-teeth. 3. Molares, or grinders.—The number of teeth is for brevity fake usually expressed by two figures, the first fignifying the number in the upper-jaw, and the second in the lower. Thus cutting teeth 4—4 fignifies, that the animal has 4 cutting teeth in the upper-jaw, - and 4 also in the lower.

Tees: the number is expressed by two figures; the first giving the number in the fore-feet, the fecond in

the hind.

Tophus: the bunch on the camel's back: applied to bunches of the fame kind on other parts.

Truncated: so blunt as to seem cut off.

Verruca: a wart.

Vibrissa: hairs on the nostrils, on the eye-lids, or about the mouth. Lin. syst. p. 35, 44, 56, 68, 72,

Uncinated : hooked. Lin. fyst. p. 95.

## EXPLANATION

OFSOME

## TECHNICAL TERMS

I N

#### ORNITHOLOGY

Used by NATURALISTS.

BASTARD-WING: a fmall joint rifing at the end of the middle-part of the wing, or the cubitus: on which are three or five feathers.

Capiffrum: a word used by Linnæus to express the short feathers on the forehead just above the bill. In crows these fall forward over the nostrils.

Gere: the naked skin that covers the base of the bill in the hawk kind.

Goverts of the tail: those feathers which cover the base of the tail.

Emarginatum:

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## TECHNICAL TERMS explained. 119

Emarginatum: a bill is called rostrum emarginatum, when there is a small notch near the end: this is conspicuous in that of butcher-birds and thrushes.

Greater coverts of the wings: the feathers that lie immediately over the quill-feathers and secondary feathers.

Leffer coverts of the wings: the small feathers that lie in several rows on the bones of the wings.—The under coverts are those that line the inside of the wings.

Lorum: the space between the bill and the eye, generally covered with feathers, but in some birds naked, as in the black and white grebe,

Nucha: the hind-part of the head.

Orbita: the skin that surrounds the eye, which is generally bare, particularly in the heron and parrot.

Pes. fcanserius: the foot of the wood-

Pes tridactylus: spoken of a foot that

wants the back-toe.

Quill-feathers: the largest feathers of the wings, or those that rise from the first bone.

Secondary

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## 120 TECHNICAL TERMs explained.

Secondary feathers: those that rise from the second bone.

Scapular feathers: those that rise from the shoulders and cover the sides of the back.

Semi-palmated: fpoken of a foot, the webs of which only reach half-way of the toes.

Vent-feathers: those that lie from the vent to the tail. Crissum Linnai.

THE END OF YOL, YIII,

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# NATURAL HISTORY,

Necessary to be consulted by those who are defirous of obtaining a thorough Knowledge in that Science.

A PIETOTEAHE wees Zown.—Aristotle's History of Animals, in nine Books.

KΛΑΥΔΙΟΥ ΑΙΛΙΑΝΟΥ σες: Ζωων εδιστητος, Βιζλια IZ.—Aelian on the Nature of Animals, in xvii Books.—He was of Præneste in Italy, and lived at Rome under Antoninus Pius.

C. Plinii Secundi Naturalis Historiæ Libri Triginta Septem.—Pliny's Natural History in xxxv11 Books——The eighth treats of Quadrupeds.

Conradi Gefneri Historia Animalium Lib, I. de Quadrupedibus viviparis. Tiguri 1551. Folio.—Gefner's History of viviparous Quadrupeds; with fome good figures in wood, at the end.

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Amftel. 1734 & 1735.—Description and figures of the most remarkable natural Curiosities in the Cabinet of Albert Seba. Two volumes large Folio.

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1764, contain some figures of Quadrupeds.

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An History of the Earth and animated Nature, by Oliver Goldsmith. In eight volumes Octavo. London, printed for J. Nourse, 1774.—Part of the second and all the third and sourth volumes treat of Quadrupeds.

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